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ABSTRACT

The ROTC/Army Career Commitment Model focused on the process of career commitment during the young adult years by examining the career path of an Army officer via the ROTC route. Research questions were related to who joins ROTC and why, who remains as a career Army officer and why, and background factors which increase or decrease commitment to an Army career. Questionnaires were circulated among a stratified random sample of 1,089 high school students, 1,633 college students (754 ROTC; 879 non-ROTC), and 634 ROTC-graduate Army officers in the period of obligated Army service. Some conclusions, based on statistical analysis, focus on: differences between ROTC cadets and classmates in demographic background, aptitudes, social environment, and socio-psychological profile (differences becoming greater with time); different factors impinging on commitment at different stages of the career commitment process; early exposure to a career path increasing subsequent participation/commitment; intrinsic, free initial motivation in joining ROTC increasing the likelihood of subsequent ROTC/Army commitment; ROTC college experience indirectly affecting commitment; a sharp break in commitment between college and immediate post-college career stages; and differences in career commitment processes of black/white Army officers. (EA)

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DEVELOPMENT OF A ROTC/ARMY CAREER COMMITMENT MODEL

FINAL REPORT
VOLUME I

J. J. Card
B. E. Goodstadt
D. E. Gross
W. M. Shanner

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
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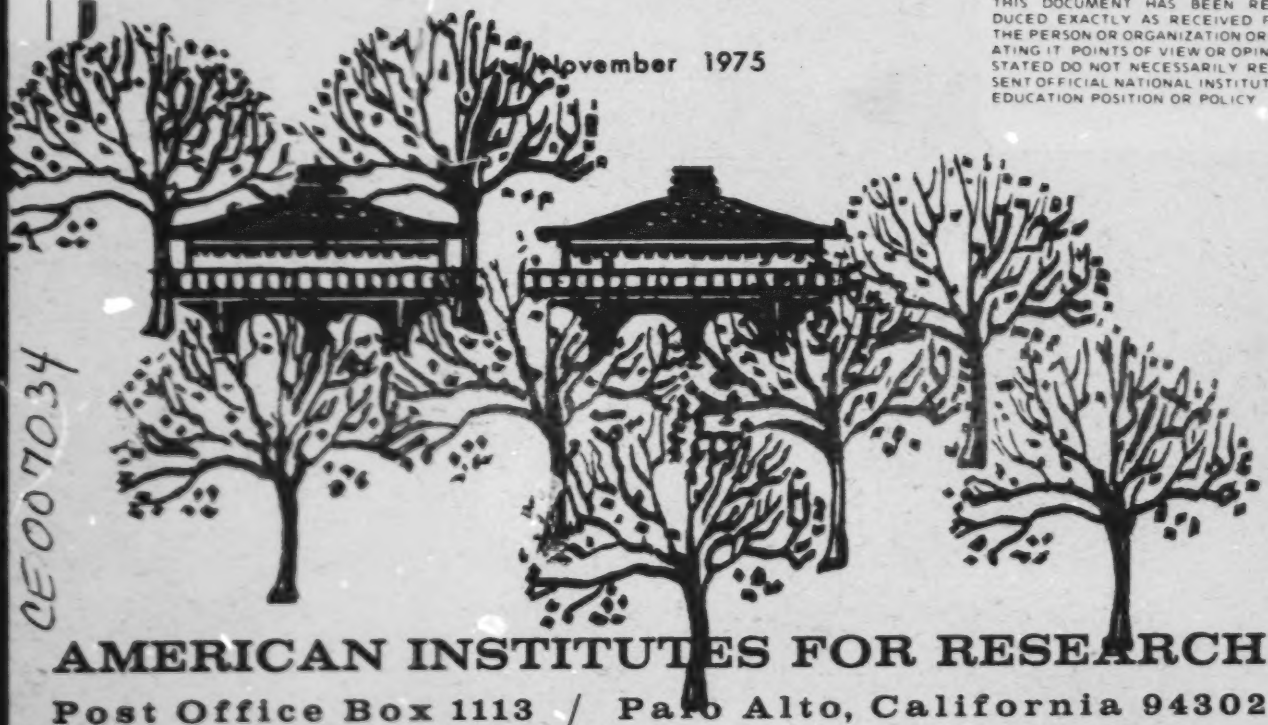

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BRIEF

The research presented in this final report was conducted from December 1973 to November 1975 under a contract with the U. S. Army Research Institute for the Behavioral and Social Sciences. The mandate of the study was to develop and test a model of career commitment in the young adult (primarily college) years. The model was to be broad enough to provide insight into the general career development process in these formative years, but specific enough to provide the Army with information it could use in recruiting, selecting, and retaining qualified officers via its college-campus Reserve Officer Training Corps (ROTC) program.

Career commitment is necessarily a longitudinal process, occurring over time and involving continuous feedback between the individual and his/her home, school, and societal environment. Because of the limited duration of the study, it was not possible to study the career commitment process longitudinally. Instead, representative cross-sections of individuals at different stages of the career commitment process were studied to simulate a longitudinal orientation.

Data on which findings are based were collected from survey questionnaires filled out by nationwide samples of 1089 high school seniors, 1633 college students (754 in ROTC, 879 not in ROTC), and 634 ROTC-graduate Army officers in their period of obligated Army service. These data were subjected to successive bivariate and multivariate statistical manipulations--including stepwise discriminant function, stepwise regression, path, and trend analyses--to arrive at the conclusions to be described. The interested reader is referred to Chapter 1 of the report for a description of the career commitment model, to Chapter 2 for details of sampling procedures and data collection, and to Chapter 3 for an overview of the analytic procedures to which the data were subjected.

Findings

- ROTC cadets differ from their classmates in their demographic background, their aptitudes, their social environment, and especially their socio-psychological profile (values, interests, aspirations, attitudes). With respect to demographic differences, a greater proportion of cadets come from military families and from families that moved around a lot while the student was growing up. With respect to aptitude differences, ROTC cadets report lower academic grades than their classmates but higher physical education abilities. With respect to social environment, ROTC cadets perceive their friends and especially their parents as having more favorable attitudes towards the military than their classmates do. With respect to socio-psychological differences, cadets place relatively higher value on patriotism, leadership, conformity, acceptance of authority, and recognition than their classmates, and relatively lower value on aestheticism, independence, religiousness, benevolence, and equalitarianism. Cadets make relatively better organizational men than their classmates: they have higher bureaucratic tendencies, lower need to control their destiny, lower alienation, and stronger commitment to the reputation of the organization. They also

attach more importance to their careers than their classmates do, and they are more likely to have taken steps towards exploring and establishing themselves in a career. Cadets place lower importance than their classmates on the job dimensions of salary, utilization of skills, stability of home life, personal freedom, and geographic desirability, but higher importance on the job dimensions of responsibility, more schooling, chance to be a leader, adventure, feedback on performance, and advancement opportunity. They are more conservative politically than their classmates. Not surprisingly they subscribe more fully to military ideology and they have more favorable attitudes towards ROTC and the Army than their classmates. They also have more accurate information than their classmates about ROTC and the Army.

- These differences between ROTC cadets and their classmates become larger with time, as one moves from the high school to the early college to the late college samples. Because of the cross-sectional nature of the present study, it is not possible to determine the extent to which these widening differences are due to: (a) attrition from the cadet group of cadets with a "deviant" profile; (b) actual changes in cadets brought about by exposure to a military career; or (c) a combination of these two mechanisms.

- Different factors impinge on commitment at different stages of the career commitment process. At the early college career stage of Basic ROTC, the "remote" predictor variables (demographic background, aptitudes, social environment while growing up) are very salient. Among these freshman and sophomore cadets, career of father, parental attitudes towards the military, and reason for joining ROTC are the most important determinants of commitment. At the late college career stage of Advanced ROTC, the salience of the "remote" background predictors gives way to "intermediate" influences on commitment, especially the match between an individual's values, attitudes, and aspirations and those required by an Army officer career. At the immediate post-college career stage of obligated Army service, the most salient determinants of commitment switch from the "remote" and "intermediate" predictors relevant during the college years to "current" job-experience variables. Job satisfaction is the strongest determinant of commitment among Army officers. Other important determinants of commitment at the Army officer career stage are: the ability to blend family life and personal freedom requirements with the demands of an Army officer job, the perception that one's supervisors are competent, and the perception that one is developing and learning skills from the job. Parental attitudes towards the military are no longer so important a determinant of commitment at the Army officer career stage, except for the Black officer subgroup.

- Early exposure to a career path increases subsequent participation in and commitment to the career path. (a) A strong career modelling effect was found in the study, with proportionately more ROTC students and Army officers having military career fathers than non-ROTC students. Also, within the ROTC student and Army officer groups, those having a military father are more committed to ROTC/Army than those having a civilian father. (b) Proportionately more ROTC students than non-ROTC students have relatives (siblings, cousins) in ROTC or the military. (c) Participation in high school Junior ROTC is positively related to ROTC/Army commitment among ROTC

college students. Attendance at a high school with Junior ROTC is positively related to ROTC/Army commitment among high school students, even when Junior ROTC participants are excluded from the computation. (d) ROTC cadets who decide to join ROTC before their sophomore year in college have higher commitment to ROTC/Army than ROTC cadets who decide to join ROTC in their sophomore year.

• The more intrinsic or free one's initial motivation in joining ROTC, the greater the likelihood of subsequent commitment to ROTC/Army. (a) Cadets who join ROTC to receive an Army commission or from patriotic motives are much more committed to ROTC/Army than cadets who join ROTC to receive its financial benefits or to avoid the draft. (b) There is no evidence that scholarships, a strong external inducement to ROTC participation, are able to retain qualified officers beyond their period of obligated Army service. (c) Respondents who perceive ROTC as a vehicle for achieving (admittedly positive) instrumental ends--to satisfy parents, to earn money in college, to have a good time, to have a guaranteed job after graduation, to postpone decisions about what to do after college--tend to have low commitment to ROTC/Army, presumably because they joined ROTC for these instrumental ends rather than to truly explore a military career.

• ROTC experiences while in college affect commitment, but only indirectly, by shaping cadets' expectations about future Army life. Experiences in ROTC--especially high grades, good performance, perceived self-development and gaining of leadership experience, challenge provided, and competence of ROTC instructors--impact on cadets' commitment by leading cadets to have favorable expectations of Army life. It is these high expectations for the future which produce commitment.

• There appears to be a sharp break in commitment and in favorability of military-related attitudes between the college and immediate post-college career stages. Military-attitude data from Army officers in the study were consistently and significantly less favorable than data from college cadets. Without longitudinal data, it is again impossible to attribute the decline to: (a) generational differences, or a drop in enthusiasm with increasing age; (b) historical differences: the present group of Army officers joined ROTC in the era of the Vietnam War and may have had lower commitment and less favorable attitudes from the moment the joined ROTC; (c) changes in officers' feelings brought about by disappointment with the Army experience; or (d) a combination of these mechanisms.

• Regular Army officers are much more committed to an Army career than Active Duty Reserve officers.

• Proportionately fewer Black ROTC graduates (compared to their White peers) are selected for a Regular Army commission. Despite this underrepresentation in the Regular Army and consequent overrepresentation in the Reserves, Black Army officers have higher commitment to ROTC/Army than White Army officers.

• Officers who value dimensions which the Army satisfies are more committed to an Army career than officers who value dimensions which the Army does not satisfy. The dimensions on which an Army officer job received

most favorable ratings were: chance to be a leader, adventure, responsibility, advancement opportunity, and self-improvement. Importance ratings assigned to these dimensions were positively related to commitment among cadets and officers. The dimensions on which an Army officer job received least favorable ratings were: stability of home life, personal freedom, geographic desirability, contribution to society, utilization of skills, and family contentment. Importance ratings assigned to these dimensions were negatively related or unrelated to commitment among cadets and officers.

- Important differences exist in the career commitment processes of Black and White Army officers. The demographic background and social environment variables are more highly related to Black officer than to White officer commitment. Parental encouragement, especially, has a strong direct influence on Black officers' commitment. For White officers, parental encouragement has only a weak, indirect influence on commitment. Commitment of White officers is to a large extent determined by predispositions present just before entering Army service. Commitment of Black officers, on the other hand, is determined directly by parental encouragement or by experiences occurring while in the Army.

These findings were expressed as several quantitative models. For each student career stage--high school, early college, and late college--a linear discriminant function was derived which predicts whether or not a student is a member of ROTC, given information on some of the variables described above. These discriminant models correctly classified about 80% of students studied as being either members or non-members of ROTC. (see Chapter 4)

Another set of quantitative models, multiple regression equations, were derived for the early college, late college, and young Army officer stages of the ROTC/Army career development process. These models predict the commitment levels of ROTC cadets and Army officers from the predictor variables described above. Career commitment as predicted by these regression equations correlated about .70 with actual career commitment. (see Chapter 5)

Finally, path models of career commitment were derived for different subgroups of cadets and officers to delineate the causal sequence leading from the predictor variables to commitment. The path models explained 35% to 53% of the variance in commitment for the subgroups. (see Chapter 6)

In addition to these quantitative models for predicting participation in and commitment to a ROTC/Army career, the study also developed a general methodology for career commitment assessment. Hence one output of the study is a general model of career commitment from which the relevant variables for investigating the ROTC/Army career path were derived. (see Chapter 1) This methodology should be of significant use in studying the process of commitment to other careers.

Recommendations

The study's findings have implications for general principles of career commitment in the young adult years, for improvement of the ROTC and Army programs, and for future research in the area of ROTC/Army career commitment. The reader interested in a full discussion of these implications is referred to Chapter 9. Only the most important implications for ROTC/Army recruitment, selection and retention, flowing from the findings described above, are given here.

- It was found that demographic background variables such as race, sex, or socioeconomic status were not nearly as powerful in predicting ROTC/Army participation and commitment as were the socio-psychological variables of values, attitudes, and job needs. Thus, selection criteria should not focus on demographic variables, except perhaps with the goal of encouraging currently underrepresented groups to apply. Rather, selection criteria should focus on the potent socio-psychological variables such as valuing patriotism and leadership, favorable military attitudes, the search for adventure and for chance to be a leader in a job, etc.

- It was found that parents are an important influence in shaping career plans, especially during the student career stages, and most especially for the Black subgroup. Thus parents are potentially an important recruitment source, and recruitment efforts could be expanded to focus on them.

- It was found that ROTC students had lower high school and college grades than non-ROTC students. Thus a greater effort should be made to recruit and select students of higher academic ability into ROTC, with the goal of having ROTC students at least on par with their classmates.

- It was found that financial benefits and job contracts attract people to ROTC/Army (indeed that the Army would lose 20-40% of its ROTC graduates without these external motivators), but that joining ROTC solely to take advantage of the financial benefits, or joining the Army merely to comply with contractual requirements, are correlated with low commitment to ROTC/Army. The social psychological literature contains advice on how to resolve these apparently contradictory matters, for policy purposes. The literature consistently says: if you must pay a person to perform an act discrepant with his/her true feelings (in the present case, if you must offer him/her a financial reward to join ROTC/Army), offer the minimum amount necessary to get the person to perform the act. Such minimum reward is associated with the greatest subsequent attitude change, i.e., the greatest reduction in perceived discrepancy of the act with one's true feelings. In the present case, offering of financial benefits large enough to attract the numbers the Army needs to ROTC, but not so large as to be perceived by recipients as the sole reason for their joining, should lead to the greatest subsequent commitment to ROTC/Army. Further research should be conducted to establish what this appropriate "minimum incentive" is.

- It was found that "late-joiners", or cadets who decided to join ROTC in their sophomore year in college had significantly lower commitment to ROTC/Army than "early-joiners", or cadets who were members of high school Junior ROTC or college Basic ROTC. This finding was partially attributable to the fact that late-joiners are influenced to a larger extent than early-joiners by the extrinsic motivator of $100/month accompanying membership in Advanced ROTC. ROTC may wish to reconsider its late-joiner option in light of this finding.

- It was found that although proportionately fewer Blacks than Whites are selected for Regular Army commissions, Blacks are more committed to ROTC/Army than Whites. It may benefit ROTC and the Army to investigate why proportionately more Black than White ROTC graduates get funnelled into the Reserves. Do Blacks have poorer grades than Whites? Do they perform more poorly in the ROTC programs? Do factors operate to discriminate against them in Regular Army selection procedures?

- The dimensions on which an Army officer career received the least favorable ratings (from all respondent groups) were: stability of home life, personal freedom, geographic desirability, contribution to society, utilization of skills, and family contentment. The fact that all groups, including ROTC cadets and Army officers, downrated the degree to which an Army officer job contributes to society, is worthy of further investigation. Further research should likewise be undertaken to find out how the Army can better serve its members on the other unsatisfactory dimensions.

ACKNOWLEDGMENTS

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The Project Staff

The matrix on the following page gives the major activities of the project, and the staff members who carried out each activity. The project was a true collaborative effort, involving a nine-member research team.

This final report was written by Dr. J. J. Card (Chapters 1, 2, 3, 4, 5, 6, and 9), with the collaboration of Drs. W. M. Shanner and D. E. Gross (Chapter 7), and Dr. B. E. Goodstadt (Chapter 8). Computer programming to analyze survey data was conducted by Dr. Gross, Dr. Card, and Dr. R. L. Frey. In addition, Dr. Gross served as Director of Field Operations. In this capacity he oversaw the project's data collection effort. Mr. F. Nielsen of the Stanford University Department of Sociology provided valuable consulting assistance on the path analysis chapter.

The Project Sponsor

The project could not have been carried out without the help of the sponsoring government agency, the U. S. Army Research Institute for the Behavioral and Social Sciences (ARI). ARI provided the American Institutes for Research with funds used to carry out this research effort. It supplied project staff with an Army personnel tape from which the Army officer sample in the present study was drawn. In addition, the project monitor, Mr. Anthony Castelnovo, provided project staff with encouragement, support and consulting advice throughout the two-year project.

DIVISION OF LABOR ON THE PROJECT
"DEVELOPMENT OF A ROTC/ARMY CAREER COMMITMENT MODEL"

PROJECT STAFF	PROJECT ACTIVITIES												
	YEAR 1							YEAR 2					
	Literature Review	Preliminary Interviews	Development of Tentative Model of Career Commitment	Construction of Survey Questionnaires	Development of Sampling Plan	Writing of Interim Reports	Writing of First Year Technical Report	Data Collection	Development of Data Analysis Master Plan	Data Coding and Checking	Computer Data Analysis	Writing of Interim Reports	Writing of Final Report
J. J. CARD *Project Director (Months 10 - 24)*			X	X			X		X		X	X	X
T. ARMSTRONG *Project Director (Months 1 - 9)*	X	X	X	X		X							
M. BORNSTEIN *Research Assistant*	X	X						X		X			
J. CLAUDY *Research Scientist*					X								
R. FREY *Research Scientist*											X		
B. GOODSTADT *Research Scientist*		X											X
D. GROSS *Associate Research Scientist*	X	X						X			X		X
J. MANGIONE *Research Assistant*	X	X						X		X			
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The Project Advisory Panel

An advisory panel of leaders in the fields of Career Development, Individual Development, Organizational Psychology, and Military Career Development provided expert advice regarding technical aspects of the project and reviewed and critiqued project procedures and products, including the present final report. A broad base of backgrounds and expertise was represented by the panel, to insure that a variety of perspectives were brought to bear on the problems addressed. The members of the Panel and their particular areas of expertise are described below.

William M. Shanner, Senior Project Investigator, AIR --
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Joseph B. Conmy, Colonel, U. S. Army (retired), AIR --
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John C. Flanagan, Chairman, Board of Directors, AIR --
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Abraham K. Korman, Professor, City University of New York --
Personnel and Organizational Psychology.

Donald E. Super, Professor, Teachers College, Columbia University --
Career Development and Developmental Psychology.

David V. Tiedeman, Professor, Northern Illinois University --
Career Decision Making and Career Development.

The Data Collection Coordinators

The following people at the 23 participating high schools and colleges assisted project staff in the data collection phase of the project. They contacted teachers, set up class time, showed project staff around their campuses, and did numerous other logistic chores which helped the project meet the requirements of its sampling plan.

Their cooperation is acknowledged with deep appreciation.

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The Interview and Survey Respondents

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J.J. Card

American Institutes for Research
November, 1975

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INTRODUCTION

This Final Report describes research procedures and findings of a two-year project entitled "Development of a ROTC/Army Career Commitment Model." This project was conducted by the American Institutes for Research under a contract with the U.S. Army Research Institute for the Behavioral and Social Sciences.

The notion of "commitment" to an Army officer career has become especially important in recent years for several reasons:

1. *the change to an all-volunteer Army.* On January 27, 1973, the military draft was officially suspended by the U.S. Secretary of Defense. It is imperative that the Army continue to recruit and retain qualified men and women as Army officers without the traditional supply furnished directly or indirectly by the draft.

2. *increased public pressure on Reserve Officer Training Corps (ROTC) units.* The turmoil and student protests associated with the Vietnam War have led to a reduction in the number of operational ROTC units on college campuses across the country, and to a general "poor image" of ROTC among young people in America. ROTC programs have long been a very important supply source for qualified young Army officers. (Currently, the Army requires approximately 15,000 new officers annually. The U.S. Military Academy at West Point graduates about 700 officers a year. The bulk of the remaining 14,300 officers are provided by Army ROTC programs.)

3. *changing career-related attitudes among young Americans.* A recent report submitted to the Secretary of Health, Education, and Welfare (Work in America. O'Toole et al., 1973) documented that today's American youth are concerned with commitment to meaningful careers and hard work, but are less willing to submit to authoritarian leadership in work settings. Moreover, the current educational system tends to reinforce questioning and critical behavior, which increases this tendency. These factors potentially affect commitment to a bureaucracy with a strong authoritarian image such as the Army.

Accordingly, the present project was aimed at providing a deeper

understanding of the process of career commitment during the college student years. Specifically, the project hoped to isolate specific factors (in the individual; in the home, school and societal environment) that contribute to or detract from commitment to a ROTC/Army career.

The project sought to answer: Who joins ROTC? Why? Which members of ROTC intend to remain on as career Army officers? Why?

In answering these questions the following successive steps were taken:

1. A tentative model of the career commitment process was developed with the help of (a) a review of the relevant literature and data banks; (b) interviews with 75 ROTC college students, 70 non-ROTC college students, and 60 Army officers; and (c) input from the project National Advisory Panel consisting of seven experts in the area of career development.

2. A survey questionnaire based on the tentative model was constructed.

3. This questionnaire was circulated among a stratified random sample of 1,089 high school students, 1,633 college students (754 in ROTC; 879 not in ROTC) and 634 ROTC-graduate Army officers in the period of obligated Army service.

4. Responses to the questionnaire were analyzed, and the tentative model of career commitment was evaluated and revised.

The project First Year Technical Report (Card, et al., 1974) contained a detailed description of the tentative model, the literature review, the interview results, the survey questionnaire, and the sampling plan for the study. These issues will, therefore, not be described in great detail in the present report. Rather, the report will briefly summarize Year 1 activities and findings and then dwell at length on results gleaned from the Year 2 survey.

The report is divided into two parts. Part I is introductory in nature and provides a brief description of the tentative model of ROTC/Army career commitment (Chapter 1), and of data collection instruments and procedures (Chapter 2). Results of the study are presented in Part II (Chapters 3-9). Chapter 3 gives a framework with which the study's findings can be viewed. Chapters 4 through 8 present the major findings of the study. Chapter 9 summarizes implications of the study's findings for the general process of career commitment and discusses implications of the study for the ROTC and Army programs and for future research in the area of ROTC/Army career commitment.

CHAPTER 1
A TENTATIVE MODEL OF CAREER COMMITMENT

A tentative model of ROTC/Army career commitment was developed to bring together existing knowledge on career commitment, to provide a theoretical framework for the generation of survey questionnaire items, and to guide the analysis of data collected as questionnaire responses. The tentative model was designed to be as broad and exhaustive as possible, in order to insure that the final empirically determined model(s) would include all crucial determinants of the career commitment process being studied.

As previously stated, several sources were used in developing the tentative model: a literature and data bank review, exploratory interviews with college students and Army officers, and input from a Project National Advisory Panel.

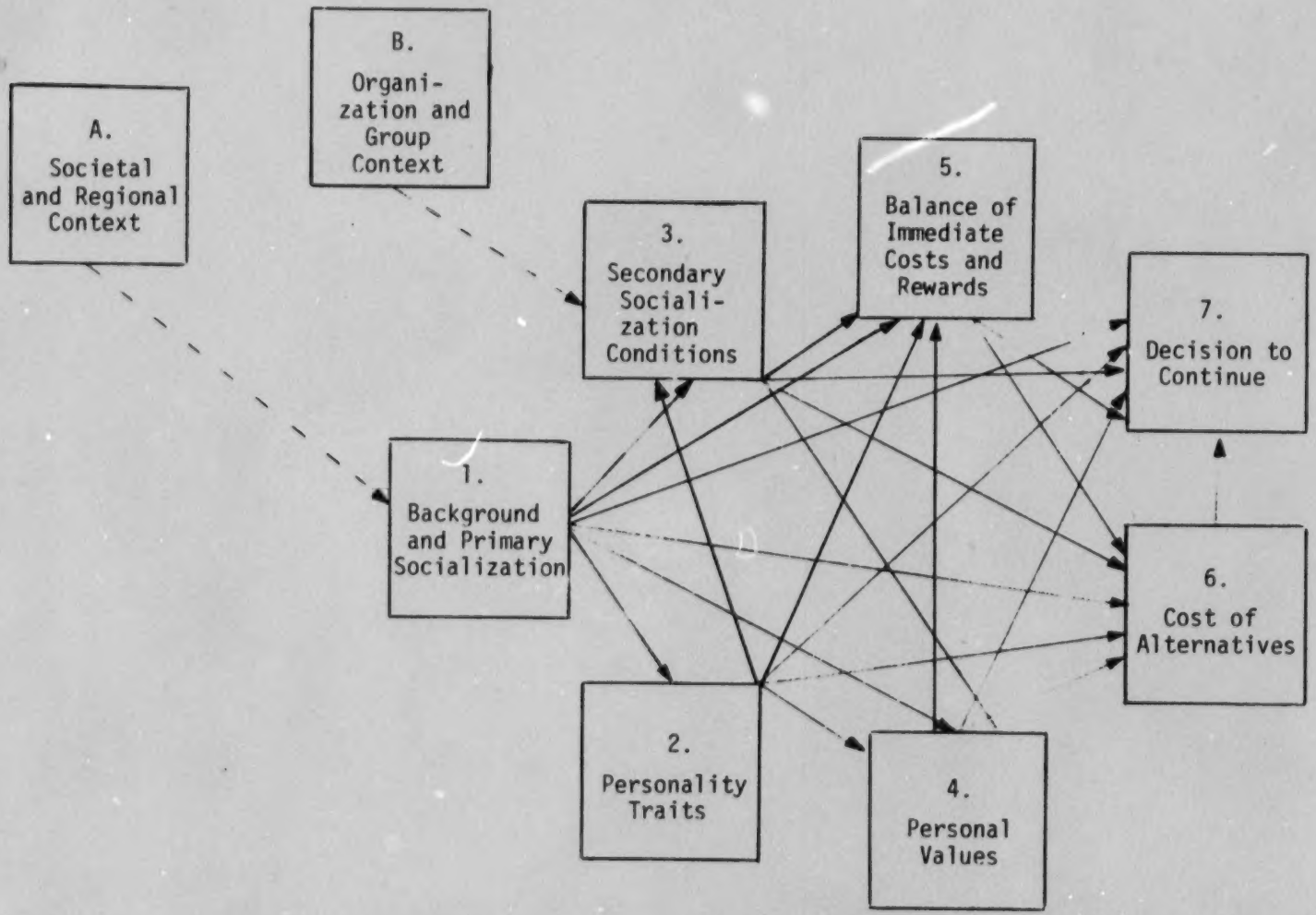
One study in particular (Schoenherr and Greeley, "Role Commitment Processes and the American Catholic Priesthood," American Sociological Review, 1974, 39, 407-426) proved very useful in structuring the tentative model. In this study a general model was proposed that explained role commitment "as a process in which continuing in the role depends on the net balance of its rewards and costs".

According to Schoenherr and Greeley, the decision to continue in a given role is a function of the following crucial variable clusters, presented in order of their assumed causal sequence (see Figure 1.1): Societal and regional context, Organization and group context, Background and primary socialization, Personality traits, Secondary socialization conditions, Personal values, Balance of immediate costs and rewards, and Cost of alternatives foregone. A change in any given variable cluster is assumed to affect one or more of the subsequent clusters; prior clusters, however, are not affected.

Schoenherr and Greeley say: "To be sure, each segment of the general model covers a broad range of social conditions. But only a relatively small subset is expected to operate in the commitment processes for any specific role." For commitment to the priesthood role, for example, the following subset of predictor variables was found to be empirically rele-

FIGURE 1.1

GENERAL MODEL OF ROLE COMMITMENT PROCESSES



vant: Age and Family tension (under the cluster Background and primary socialization), Inner-directedness (a Personality trait), Religious experience (a Secondary socialization condition), Modern values (a Personal value), Work satisfaction and Loneliness (a Reward and Cost Balance factor), and the Desire to marry (a Cost of alternatives foregone). Together these eight predictor variables explained over 50% of the variance (R = .71) in the decision to continue in the priesthood role.

In developing the tentative model of ROTC/Army career commitment for the present study, the following steps were taken:

1. Factors theoretically and empirically associated with career commitment, especially with ROTC/Army recruitment, selection, and retention, were generated from the literature review, the interviews, and the National Advisory Panel discussions.

2. These factors were grouped conceptually using the Schoenherr and Greeley framework for studying role commitment processes.

The resultant tentative model of ROTC/Army career commitment is given in Figure 1.2.

Three aspects of the commitment process are included in Figure 1.2.: (a) the *series of decisions* (represented as diamonds) made by an ROTC student through the college years and the initial period of obligated Army service; (b) the hypothesized *universe of factors* (represented as boxes) that determine, or correlate with, each decision in the series; (c) the *structural relationship among the predictor factors*, indicated by the grouping of related variables (into single boxes) and the ordering of the groups into an assumed causal sequence (indicated by the box numbers).[1]

Each of these aspects will be discussed in turn.

The Decision to Participate and Remain in ROTC/Army

The present study conceptualizes career commitment as a sequential

---

[1]Because all the data in the current study were gathered at a single point in time, the term "predictor" as used in this report will refer to this *assumed* causal sequence. Only a longitudinal study can establish whether some of the obtained correlates of commitment are indeed predictors of commitment or whether they are instead consequences of commitment.

process with two components: (a) *participation* -- an individual must decide to join, or participate in, the career path, e.g., by majoring in a relevant subject area, or in the case of the ROTC/Army career path, by joining ROTC; (b) *commitment* -- a participant in the career path must intend to remain in the path of choice; this intention must be borne out by subsequent behavior.

Participation is easily measured because it is, in a sense, dichotomous: either one is a member of ROTC, or one is not. Commitment is not so easily conceptualized because it involves future intentions which are not always clear to the individual and which, even when clear, are subject to modification by future events.

Following Kiesler (1971) commitment is defined as "pledging or binding of the individual to behavioral acts". It is assumed "that commitment is a continuous variable, rather than a dichotomous one. That is, people are referred to as more or less committed to some behavior, rather than being simply committed or not" (Kiesler, 1971, p. 30).

As Figure 1.2 showed, there are four behavioral decisions of concern in the present study, each representing an increasing commitment to an Army career. The acts are: (a) Joining the Basic ROTC program, or its summer camp equivalent (diamond 8); (b) Continuing in the Basic ROTC program (diamond 10); (c) Joining the Advanced ROTC program (diamond 12); and (d) Joining the Regular Army or Active Duty Reserve (diamond 13).

It is important that our commitment measure look beyond these behavioral indices of commitment to other attitudinal indices of "pledging or binding" to the roles of ROTC cadet and Army officer. This is so particularly because of the contractual obligation incurred by some of these ROTC-related decisions:

- When one joins the Advanced ROTC program he/she contracts a two-year obligation to the Army:
- When one accepts an ROTC scholarship (anytime during the four years in college) he/she contracts a four-year obligation to the Army;
- When one accepts a Regular Army commission, he/she contracts a three-year obligation to the Army.

It may be assumed that individuals continuing in ROTC and then serving in the Army solely because of contractual obligations are less committed

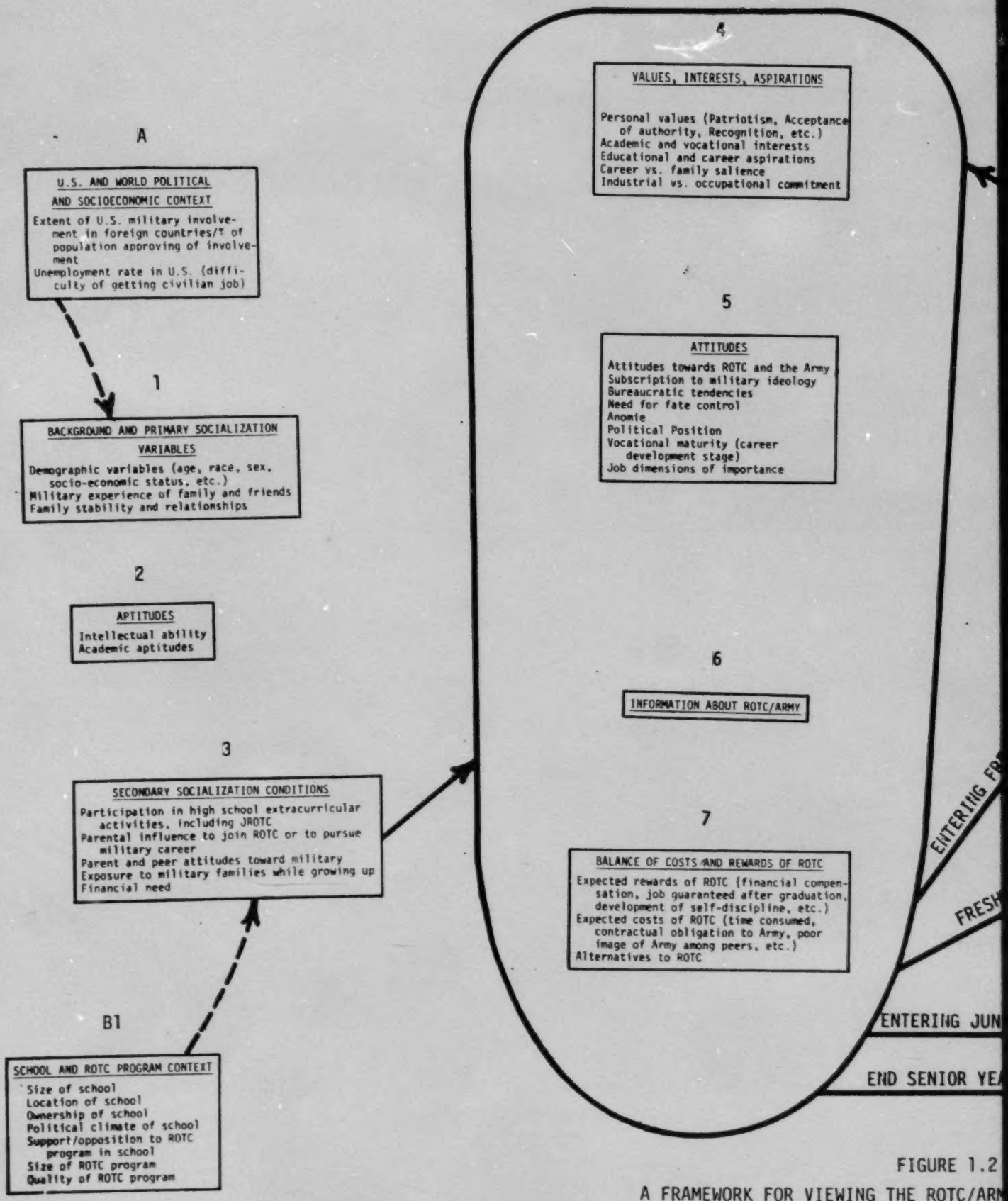
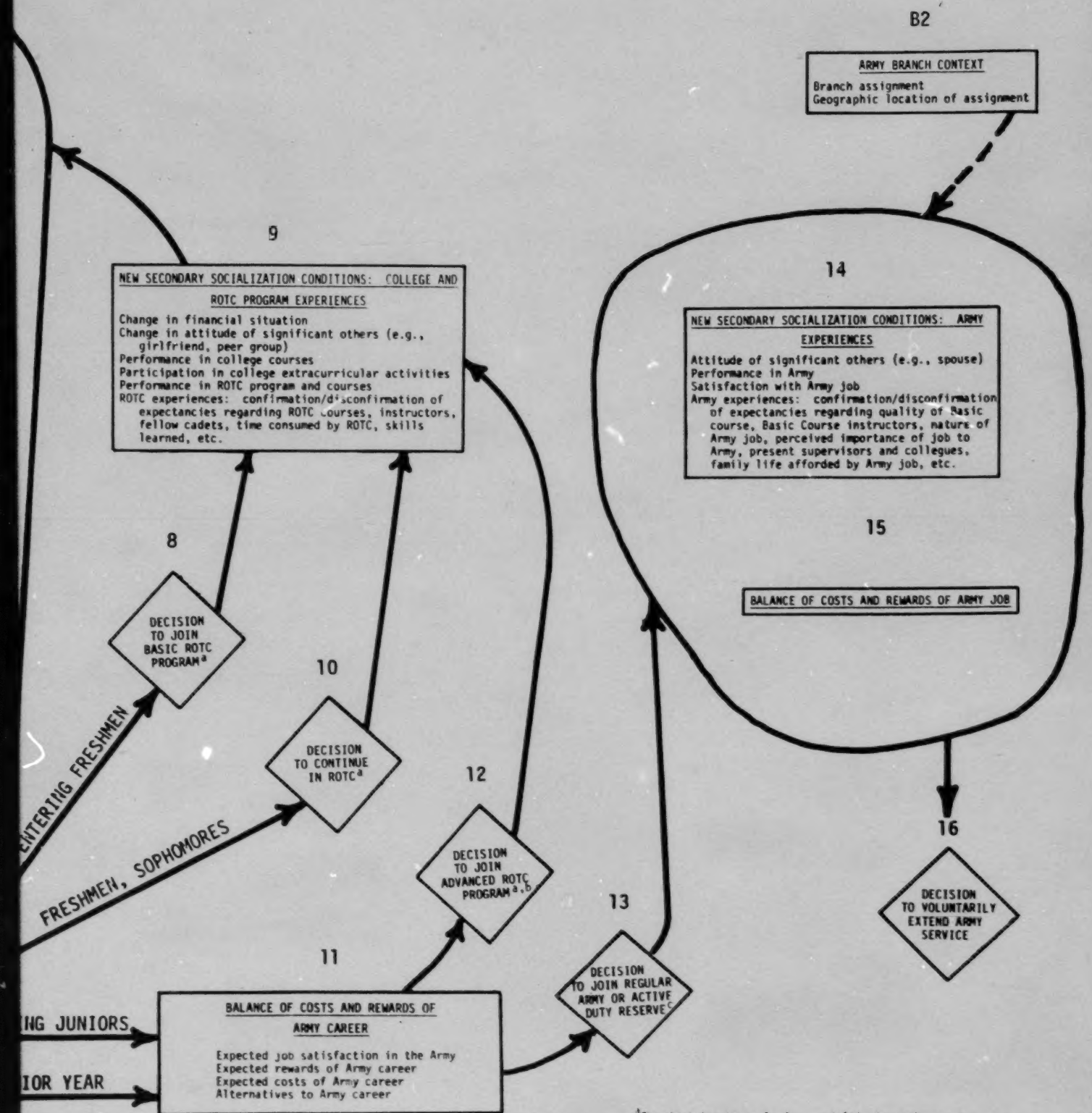

A
U.S. AND WORLD POLITICAL AND SOCIOECONOMIC CONTEXT
Extent of U.S. military involvement in foreign countries/% of population approving of involvement
Unemployment rate in U.S. (difficulty of getting civilian job)
1
BACKGROUND AND PRIMARY SOCIALIZATION VARIABLES
Demographic variables (age, race, sex, socio-economic status, etc.)
Military experience of family and friends
Family stability and relationships
2
APTITUDES
Intellectual ability
Academic aptitudes
3
SECONDARY SOCIALIZATION CONDITIONS
Participation in high school extracurricular activities, including JROTC
Parental influence to join ROTC or to pursue military career
Parent and peer attitudes toward military
Exposure to military families while growing up
Financial need
B1
SCHOOL AND ROTC PROGRAM CONTEXT
Size of school
Location of school
Ownership of school
Political climate of school
Support/opposition to ROTC program in school
Size of ROTC program
Quality of ROTC program
4
VALUES, INTERESTS, ASPIRATIONS
Personal values (Patriotism, Acceptance of authority, Recognition, etc.)
Academic and vocational interests
Educational and career aspirations
Career vs. family salience
Industrial vs. occupational commitment
5
ATTITUDES
Attitudes towards ROTC and the Army
Subscription to military ideology
Bureaucratic tendencies
Need for fate control
Anomie
Political Position
Vocational maturity (career development stage)
Job dimensions of importance
6
INFORMATION ABOUT ROTC/ARMY
7
BALANCE OF COSTS AND REWARDS OF ROTC
Expected rewards of ROTC (financial compensation, job guaranteed after graduation, development of self-discipline, etc.)
Expected costs of ROTC (time consumed, contractual obligation to Army, poor image of Army among peers, etc.)
Alternatives to ROTC
ENTERING FR
FRESH
ENTERING JUN
END SENIOR YE

FIGURE 1.2
A FRAMEWORK FOR VIEWING THE ROTC/ARM


ARMY BRANCH CONTEXT
Branch assignment
Geographic location of assignment
9
NEW SECONDARY SOCIALIZATION CONDITIONS: COLLEGE AND ROTC PROGRAM EXPERIENCES
Change in financial situation
Change in attitude of significant others (e.g., girlfriend, peer group)
Performance in college courses
Participation in college extracurricular activities
Performance in ROTC program and courses
ROTC experiences: confirmation/disconfirmation of expectancies regarding ROTC courses, instructors, fellow cadets, time consumed by ROTC, skills learned, etc.
14
NEW SECONDARY SOCIALIZATION CONDITIONS: ARMY EXPERIENCES
Attitude of significant others (e.g., spouse)
Performance in Army
Satisfaction with Army job
Army experiences: confirmation/disconfirmation of expectancies regarding quality of Basic course, Basic Course instructors, nature of Army job, perceived importance of job to Army, present supervisors and collegues, family life afforded by Army job, etc.
15
BALANCE OF COSTS AND REWARDS OF ARMY JOB
8
DECISION TO JOIN BASIC ROTC PROGRAM[a]
10
DECISION TO CONTINUE IN ROTC[a]
12
DECISION TO JOIN ADVANCED ROTC PROGRAM[a,b]
13
DECISION TO JOIN REGULAR ARMY OR ACTIVE DUTY RESERVE[c]
16
DECISION TO VOLUNTARILY EXTEND ARMY SERVICE
11
BALANCE OF COSTS AND REWARDS OF ARMY CAREER
Expected job satisfaction in the Army
Expected rewards of Army career
Expected costs of Army career
Alternatives to Army career
ENTERING FRESHMEN
FRESHMEN, SOPHOMORES
ING JUNIORS
IOR YEAR

[a]The decision to apply for, and (if offered) accept, an ROTC scholarship may also be made at this point. Acceptance of a scholarship obligates the person to a 4-year tour of duty in the Army.

[b]Joining the Advanced ROTC program without a scholarship obligates the person to a 2-year tour of dut, in the Army.

[c]Joining the Regular Army obligates the person to a 3-year tour of duty in the Army.

RE 1.2
OTC/ARMY CAREER COMMITMENT PROCESS

than individuals serving with eagerness and independently of any external constraints. One would expect that when contractual constraints are lifted, a greater proportion of the latter group would in fact continue to serve.

Thus the criterion of commitment to ROTC/Army is conceptualized as a single scale-variable, based on a composite of several indicators:

1. behavioral indices, such as
   - joining ROTC
   - remaining in ROTC
   - joining the Regular Army or Active Duty Reserve
2. attitudinal indices, such as
   - certainty of one's plans regarding joining or continuing in ROTC/Army
   - eagerness with which the fulfillment of one's plans regarding ROTC/Army are anticipated
   - length of intended service
   - attachment to ROTC/Army

The Predictor Variables Hypothesized to Correlate with Participation and Commitment

Having discussed the criterion variable of participation in and commitment to an ROTC/Army career, the discussion now turns to the second aspect of the commitment process included in the tentative model: the hypothesized universe of factors that correlate with participation and commitment. Figure 1.3 lists and defines all predictor variables and states the hypothesis tying the predictor to the criterion variables. Sources of each hypothesis are also listed in the figure.

Stages in the ROTC/Army Career Commitment Process

The final aspect of the career commitment process included in the tentative model is the grouping of related predictor variables into predictor clusters and the delineation of the hypothesized structural relationships among the predictor clusters and the criterion variables. The

FIGURE 1.3

THE TENTATIVE MODEL'S PREDICTOR VARIABLES: DEFINITIONS & RELEVANT HYPOTHESES

Name of Variable	Definition	Hypotheses & References
U. S. and World Political and Socioeconomic Context		
Extent of U. S. military involvement in foreign countries/percent of population approving of such involvement		U. S. involvement in a war people approve of will increase participation in and commitment to ROTC/Army. In an unpopular war, participation in and commitment to ROTC/Army will decrease.*
Unemployment rate/difficulty of getting civilian job		Increased difficulty in getting civilian jobs will increase participation in ROTC/Army.*
		*These hypotheses are not testable in the present cross-sectional study.
School and ROTC Program Context		
Size/Location/Ownership of school		No specific hypotheses.
Political climate of school/Support or opposition to ROTC program in school		Student body opposition to an ROTC program will decrease participation in the program.
Size of ROTC program		No specific hypotheses.
Quality of ROTC program		The higher the quality of an ROTC program, the greater the mean commitment to ROTC among its cadets.
Background and Primary Socialization Variables		
Demographic variables	Background variables such as Age, Race, Sex, Socio-economic status, etc.	ROTC students will be disproportionately male; will tend to come from the northeast and southeast. Their parents will have a modal income of $10-15,000, lower than the modal income ($20,000) of parents of non-ROTC students. (Fisher, Harford, & DiSario, 1974; Montgomery, et al., 1974)
Military experience of family and friends	Number and closeness of relatives and friends who were (are) in ROTC and in military life	The proportion of ROTC students coming from military families will be higher than the proportion of non-ROTC students coming from military families. (Project interview data)
Family stability and relationships	Mobility of family while growing up; Parents divorced or not	No specific hypotheses.
Aptitudes and Achievements		
Intellectual ability	Grade point average in high school and/or college	No specific hypotheses.
Academic aptitudes	Stated aptitude for various academic areas	ROTC students will have highest aptitude for mathematics and English. (Flanagan, et al., 1973)
Secondary Socialization Conditions		
Participation in high school extracurricular activities, including JROTC		While in high school, ROTC students will have participated in a greater number of extracurricular activities than non-ROTC students. Also, a greater proportion of ROTC students will have participated in JROTC. (Montgomery, et al., 1974)
Parental influence to join ROTC or to pursue military career	Perceived strength of parental urging to join ROTC or pursue military career	ROTC students will be more likely to have experienced parental influence to join ROTC or pursue a military career than non-ROTC students. (Project interview data; Fitzpatrick, 1957)
Parents and peer attitude towards military	The degree to which the military establishment is perceived in a positive or negative light by one's parents and peers	Favorable military attitudes held by one's parents and peers will be positively correlated with ROTC/Army participation and commitment. (Project National Advisory Panel Meeting, 1974; Montgomery, et al., 1974; Fitzpatrick, 1957)

Exposure to military families while growing up		Contact with military families while growing up will be positively correlated with ROTC/Army participation and commitment.
Financial need	The extent to which one needs financial help to make it through college	ROTC students will have greater financial need than non-ROTC students. (Montgomery, et al., 1974)
Values and Aspirations		
Personal values		ROTC students will value patriotism, recognition, independence, leadership, and acceptance of authority more than non-ROTC students. Non-ROTC students will value benevolence and need for uniqueness more than ROTC students. (Montgomery, et al., 1974; Waters (in Gordon, 1963); Bronzo & Baer, 1968)
Academic and vocational interests		ROTC students will have highest academic interest in natural sciences and mathematics. (Flanagan, et al., 1973)
Educational and career aspirations	Highest academic degree desired; salary aspirations for future	No specific hypotheses (Montgomery, et al., 1974 found that ROTC students had higher educational goals than non-ROTC students. But project interview data show otherwise.)
Career salience vs. family salience	The relative importance of one's job or career vs. one's family	Commitment to ROTC/Army will be negatively correlated with importance of close family ties. (Project interview data; Fitzpatrick, 1957)
Industrial vs. occupational commitment	Commitment to an organization (e.g., the Army) vs. commitment to a special type of work	Cadets and Army officers will exhibit industrial commitment more than occupational commitment. (Project National Advisory Panel Meeting, 1974, Montgomery, et al., 1974)
Attitudes		
Beliefs about ROTC and the Army	The degree to which ROTC and the Army is perceived in a positive or negative light	ROTC students will have a more favorable attitude towards ROTC and the Army than non-ROTC students. Favorableness of military-related attitudes will be positively related to commitment among the ROTC and Army samples. (Montgomery, et al., 1974; Johnston & Bachman, 1972; Fisher & Harford, 1972)
Subscription to military ideology	The degree to which one believes in the assumptions and foundations of the military structure	ROTC students will subscribe to military ideology to a greater extent than non-ROTC students. Subscription to military ideology will be positively related to commitment among the ROTC and Army samples. (Fitzpatrick, 1957)
Bureaucratic tendencies	A commitment to the set of attitudes, values, and behaviors that are characteristically fostered and rewarded by bureaucratic organizations	ROTC students will have greater bureaucratic tendencies than non-ROTC students. A high score on the bureaucratic tendencies scale will be positively related to commitment among the ROTC and Army samples. (Bronzo, 1966; Bridges, 1967; Bronzo & Baer, 1968; Gordon, 1973)
Need for fate control	Need to control one's own destiny	Non-ROTC students will have greater need to control their personal fate than ROTC students. A high need for fate control will be negatively related to commitment among the ROTC and Army samples. (Fitzpatrick, 1957)
Anomy	Normlessness; alienation	High anomy will lead individuals to seek out membership in an organization with strong norms, like ROTC/Army.

Political position	An individual's own assessment of where he/she stands on the "liberal-conservative" dimension	ROTC students will be more conservative than non-ROTC students.
Vocational maturity	Stage of career development, as measured by Super's Career Development Inventory	Among Army officers, being at a stage of career development appropriate to one's age will be positively correlated with job satisfaction. (Super, personal communication)
Job dimensions of importance	Aspects of a job that one finds salient to one's personal job satisfaction	Students who value job and financial security will be more attracted to an Army career than students who do not.
Information about ROTC/Army		
Information about ROTC/Army		Amount and accuracy of knowledge about ROTC/Army will be positively correlated with participation intentions among those not in ROTC and with commitment level among those in ROTC/Army.
Balance of Costs and Rewards of Joining ROTC		
Expected rewards of ROTC (actual rewards for ROTC sample)	Benefits afforded by ROTC (e.g., financial compensation, job guaranteed after graduation, development of self-discipline, etc.)	Number of benefits perceived as afforded by ROTC will be positively related to participation and commitment, if the perceived costs are not beyond a certain maximum. (Schoenherr & Greeley, 1974)
Expected costs of ROTC (actual costs for ROTC sample)	Disadvantages of ROTC (e.g., time consumed, contractual obligation to Army, poor image of Army among peers, etc.)	Number of disadvantages perceived as afforded by ROTC will be negatively related to participation and commitment. (Schoenherr & Greeley, 1974)
Alternatives to ROTC	Other sources of rewards offered by ROTC (e.g., other scholarship, West Point)	A student will join and continue in ROTC if its net rewards outweigh the net rewards of its alternatives.
Expected Balance of Costs and Rewards of an Army Career		
Expected satisfaction of job characteristics in the Army	Ratings of various job dimensions (such as pay, job security) on (1) importance to self, (2) potential satisfaction in Army (actual satisfaction for Army officer sample)	The more one perceives the Army as being able to offer him/her the job dimensions he/she perceives as important, the greater the likelihood of participation and commitment in ROTC/Army. (Schoenherr & Greeley, 1974)
Expected rewards of an Army career	Perceived benefits of an Army career (e.g., salary, job security, fringe benefits, opportunity to serve country, etc.)	Number of benefits perceived as afforded by an Army career will be positively related to participation and commitment, if the perceived cost are not beyond a certain maximum. (Schoenherr & Greeley, 1974)
Expected costs of an Army career	Perceived disadvantages of an Army career (e.g., loss of fate control, separation from family, etc.)	Number of disadvantages perceived as afforded by an Army career will be negatively related to participation and commitment. (Schoenherr & Greeley, 1974)
Alternatives to an Army career	Other available careers (e.g., other military career, civilian career)	The more one perceives an Army career's net rewards as exceeding those of its alternatives, the greater the likelihood of participation and commitment in Advanced ROTC/Army.
New Secondary Socialization Conditions: College and ROTC Program Experiences		
Change in financial situation		Newly emergent financial needs while in college may cause a student to consider joining ROTC.
Change in attitude of significant others		Acquisition of new significant others while in college (e.g., a new peer group, fiancee, or spouse) will cause one's commitment to ROTC/Army to change in the direction of the attitudes of the significant other(s).

Performance in college courses	Course grades in academic courses	A low academic grade point [illegible] decrease commitment to ROTC/Army
Participation in college extra-curricular activities		Participation in extracurricular activities other than ROTC will decrease commitment to ROTC. (Montgomery, et al., 1974)
Performance in ROTC program and courses	ROTC course grades	Performance in ROTC is positively correlated with commitment- the better the performance, the stronger the commitment.
ROTC experiences: confirmation/ disconfirmation of expectations	Extent to which one's expectations about ROTC were found to be accurate or inaccurate. (Note: Expectations concerning ROTC will be gleaned by looking at ROTC beliefs held by High School Seniors and College Freshmen intending to join ROTC)	Disconfirmation of one's expectations regarding supervisors, colleagues, time consumed by ROTC, etc. leads to a decline in commitment to ROTC. (Goodstadt, et al., 1973)
Army Branch Context		
Branch assignment		Army officers who were assigned to their first-choice branch will be more committed to the Army than officers who did not get their first-choice assignment. No specific hypotheses about inter-branch differences in commitment.
Geographic location of assignment		The happier an Army officer is with the geographic location of his/her assignment, the more committed he/she will be to the job. No specific hypotheses about inter-location differences in commitment.
New Secondary Socialization Conditions: Army Experiences		
Performance in Army		Good performance on the job increases commitment to the Army
Satisfaction with Army job		Satisfaction with one's Army job (especially on the job dimensions one considers important) increases one's commitment to the Army. (Fitzpatrick, 1957)
Army experiences: confirmation/ disconfirmation of expectations	Extent to which one's expectations about the Army were found to be accurate or inaccurate. (Note: Expectations concerning the Army will be gleaned by looking at beliefs about the Army held by ROTC Juniors and Seniors)	Disconfirmation of one's expectations regarding Army leaders, colleagues, nature of job, importance of job to Army, etc. leads to a decline in commitment to the Army. (Goodstadt, et al., 1973)

model welds all its components into an assumed causal sequence, and describes which predictor factors become operative at each stage of the career commitment process.

The first relevant variable in the model is the *context* in which the entire process occurs. This includes the U. S. and world political and socio-economic climate (see Box A, Figure 1.2), as well as the school, ROTC program, and Army branch context (Box B1 for the student sample; Box B2 for the Army officer sample). Context variables were *not* measured in the current study, except for certain school-structure variables such as size, location, and ownership, which were used to stratify the school sample used in the study.

The next predictor cluster consists of *individual background and socio-psychological traits* predisposing an individual to the ROTC/Army officer career path. This second cluster of variables includes an individual's Demographic profile (Box 1), Aptitudes (Box 2), Secondary socialization conditions (Box 3), and Values, Interests, Aspirations, and Attitudes (Boxes 4 and 5). Figures 1.2 and 1.3 list the variables measured under each of these clusters.

The third crucial cluster leading to the initial commitment decision (the decision to participate in ROTC) has to do with *acquisition of information about the ROTC/Army career path* (Box 6). Such information will either be sought out by the interested individual, or acquired directly from his/her environment, e.g., by the presence of military role models in the family. This acquisition of information about a career is the first active step taken by the individual in the career choice process.

The information is then assumed by the model to lead to the fourth crucial predictor cluster, namely, an individual's *expectations about the rewards and costs* of ROTC/Army (Box 7), in light of the *alternatives* available, and the individual's previously discussed *aspirations* and *values*. Is there more to be gained than lost by joining ROTC? What are the alternatives available that may satisfy the major rewards ROTC has to offer (e.g., other sources of financial support, as an alternative to obtaining the goal of having enough money to go to college; enrolling at West Point, as an alternative to obtaining the goal of receiving training for an Army officer career).

On the basis of this weighing of rewards versus costs, the individual

decides whether or not to join ROTC. This decision may not always be consciously made. For example, the project preliminary interview data showed that some anti-military students link all things military, including ROTC, with killing and war, and have never even considered joining ROTC.

The *decision to participate in ROTC*, then, (Diamond 8) is based on all these prior influences in the sequence: the societal and group context; an assessment of whether one's aptitudes, values, interests, aspirations and attitudes are compatible with military life; information about ROTC and the Army; and an assessment of whether the rewards of ROTC outweigh its costs, in light of the alternatives available. Again it must be pointed out that these influences are not always explicitly and rationally evaluated by an individual participant, even though strong relationships between them and the criterion will be documented.

The crucial determinants of commitment once an individual has decided to join ROTC shift to one's *experiences* (Box 9) in the program, chiefly whether one *performs* well in it, and whether one's *prior expectations regarding its rewards are confirmed*. The crucial expectations will, of course, vary from one cadet to another. They could include: competent instructors, friendly cadets, opportunities for leadership training, financial support, interesting courses with useful applications, development of self-awareness and self-discipline, good preparation for a career in the Army or civilian life, and a chance to have some fun. One important rule at this stage of the process is: disconfirmation of expectancies important to the individual will have a stronger (negative) effect on commitment than disconfirmation of expectancies not important to the individual.

Figure 1.2 goes on to imply that the crucial experiental variables of performance and confirmation/disconfirmation of expectancies feed back into and often change the ROTC cadet's values, interests, aspirations, and attitudes. The experiences also equip him/her with additional, more accurate information about ROTC. A reassessment of the rewards and costs of ROTC is then undertaken, based on expectations for the future in light of the previous experience.

This cycle of Experiences ⟶ Change in values, interests, attitudes ⟶ Additional information about ROTC ⟶ Reassessment of the costs and rewards of ROTC is repeated throughout the ROTC years. There are three points at

which crucial ROTC-related decisions are made: (a) acceptance of an ROTC scholarship, which can occur anytime during the four years in college; (b) joining the Advanced ROTC program at the start of the Junior year in college; (c) applying for and receiving a Regular Army Commission at the end of the Senior year. These decisions obligate the cadet to a 4-, 2-, and 3-year Army service, respectively.

Thus, prior to making these decisions, a set of expectations over and above those concerning ROTC have to be weighed by an individual. These are related to the *rewards and costs of the period of obligated Army service* (Box 11) incurred by the decision. Included in these considerations is expected job satisfaction in the Army: Will the Army offer me the things I consider important in a job (e.g., salary, advancement opportunities, responsibility, freedom, security, contribution to society)? What are the alternatives I am foregoing by giving 2, 3, or 4 years of my immediate post-college life to the Army?

Finally, once in the Army, crucial *experiences* (Box 14) again confirm or disconfirm the expectancies. The experiences include: performance in the Army, satisfaction with one's job, ability to secure desired assignments, fringe benefits, prestige, freedom of action, travel opportunities, relationships with supervisors, and opportunities for contribution to society. These experiences, plus possible new personal influences in one's life (e.g., a new spouse, starting a family) lead to a reassessment of the *balance of costs and rewards of Army life* (Box 15). On the basis of this assessment, the young officer then either voluntarily extends his/her Army stint or returns to civilian life when the period of obligated Army service is up.

Generalization of the Model to Other Career Paths

While many of the specific variables examined in the present study are unique to the ROTC/Army career commitment process, the list and causal sequencing of the predictor clusters should be applicable to other career paths. What the general framework says is that certain societal influences, background and secondary socialization conditions, certain aptitudes, achievement experiences, values, interests, aspirations, and attitudes predispose an individual to explore a given career alternative, e.g., joining ROTC,

majoring in a certain subject, etc. The person's experience during the exploration, especially the confirmation or disconfirmation of expectancies regarding various aspects of the career (courses, teachers, own performance in the area, etc.) then either: (a) positively reinforces the prior decision, leading the individual to continue the exploration; or (b) negatively reinforces the prior decision, leading the individual to consider putting an end to the exploration. The specific background, trait, and experiental factors leading an individual to explore a given career alternative would, of course, vary from one career to another. For the present study, factors specifically relevant to the ROTC/Army career route have been isolated. The method and general clusters looked at, however, could serve as a heuristic for those interested in looking at other career paths.

CHAPTER 2

DATA COLLECTION INSTRUMENTS AND PROCEDURES

The preceding chapter described the tentative model of career commitment. The present chapter describes: (a) the survey instruments developed to measure the variables specified in the tentative model; (b) the respondents who answered the survey questionnaire; (c) data collection procedures used with the various respondent groups; and (d) data coding and preliminary analysis procedures.

The Survey Questionnaires

Appendices A, B, and C give the high school, college, and Army officer questionnaires used in the study. The questionnaires took 35-55 minutes to complete. A pilot test of each questionnaire was conducted prior to its use in the large-scale survey to eliminate minor problems with item wording and questionnaire length.

Sixty-four seniors from one high school (Awalt) and 93 students from one college (University of San Francisco) in the San Francisco Bay Area, along with 34 Army officers, participated in the pilot test. In addition, a draft of each questionnaire was critiqued by members of the project National Advisory Panel, by members of the staff of the sponsoring U. S. Army Research Institute for the Behavioral and Social Sciences, and by members of the technical staff of the Office of Management and Budget, which provided clearance to use the questionnaire with civilian respondents.

In order to increase their visual appeal to prospective respondents, the questionnaires were bound in colorful covers printed with bold artwork. This was done primarily in response to an article by Dillman, Christenson, Carpenter, and Brooks (1974) which reported that attractive packaging of survey questionnaires increased their rate of return.

Contents of the Questionnaires

The questionnaires were designed to measure each variable contained in

the tentative model of career commitment. Wherever possible, existing items or scales were used, to prevent a proliferation in the literature of good measures of a single variable. Figure 2.1 shows how the items in the three questionnaires mapped onto the variables in the tentative model. The figure also gives the source of questionnaire items and scales that were developed by previous investigators.

Format of the Questionnaires

The questionnaires were divided into seven sections:

I. Background Information
II. School Life
III. Job Plans and Aspirations
IV. ROTC and Military-Related Questions
V. Personal Values
VI. Opinion Survey
VII. Career-related Concerns (College and Army officer questionnaires) or College-related Decisions (High School questionnaire)

Respondents were asked to record their answers on a separate answer sheet to facilitate and reduce error in data processing (see Appendices D, E, and F). To avoid confusion, all questionnaire items were sequenced by letter of the alphabet. All responses were in the form of number(s) associated with the desired category.

The questionnaire items were all of the "objective" type, again in order to facilitate data processing. Construction of such objective items was made possible by an analysis of data from the interviews conducted in Year 1 of the project. All responses to crucial interview questions (e.g., Why did you join ROTC? What do you like/dislike about ROTC/Army?) that were given by at least ten (5%) interview respondents were reflected in the questionnaire. Thus the range of ROTC and Army-related items and responses in the questionnaire rests on an empirical foundation.

Standardization of Items Across Questionnaires

Items were kept as standard as possible throughout the three questionnaires, except for word changes reflecting differing time perspectives of the samples. In addition, items were omitted if they were not applicable to one or more groups. For example, the section on career-related concerns was felt

FIGURE 2.1

MAPPING OF QUESTIONNAIRE ITEMS TO THE VARIABLES IN THE TENTATIVE MODEL

Name of Variable	Questionnaire Items			Source of Items
	High School Questionnaire	College Questionnaire	Army Questionnaire	
BACKGROUND AND PRIMARY SOCIALIZATION VARIABLES				
Demographic variables	I-A to P	I-A to P	I-A to P	Montgomery, et al., 1974*
Military experience of family and friends	I-Q to T	I-Q to T	I-Q to T	
Family stability and relationships	I-W to Y	I-W to Y	I-W to Y	
APTITUDES AND ACHIEVEMENT				
Intellectual ability	II-A	II-A,D,E	II-A,D	
Academic aptitudes	II-D	II-G	II-F	
SECONDARY SOCIALIZATION CONDITIONS				
Participation in high school extracurricular activities	II-B,C	II-B,C	II-B,C	
Parental influence to join ROTC or to pursue military career	IV-A(i)	IV-B(i),I	IV-A(i)	
Parent and peer attitudes towards military	I-AA to DD	I-AA to DD	I-AA to DD	
Exposure to military families while growing up	I-U,V	I-U,V	I-U,V	
Financial need	IV-A(k)	II-E; IV-B(k),U	IV-A(k)	
VALUES, INTERESTS, AND ASPIRATIONS				
Personal values	V-A	V-A	V-A	Gordon, 1963**
Academic and vocational interests	II-E	II-H,J,K	II-G,I,J	
Educational and career aspirations	II-F; III-C,D; VII-A to H	II-I; III-C,D	II-H; III-C,D	
Career vs. family salience	III-A	III-A	III-A	
Industrial vs. occ. commitment	III-B	III-B	III-B	
ATTITUDES				
Attitudes toward ROTC and the Army	IV-A,B	IV-B,C	IV-A,B	Montgomery, et al., 1974**
Subscription to military ideology	VI-I,U to BB	VI-I,U to BB	VI-I,U to BB	Fitzpatrick, 1957
Bureaucratic tendencies	VI-A to H,CC	VI-A to H,CC	VI-A to H,CC	Gordon, 1973
Need for fate control	VI-J to O	VI-J to O	VI-J to O	Goodstadt, et al., 1973
Anomy	VI-P to T	VI-P to T	VI-P to T	McClosky & Schaar, 1965
Political position	I-Z	I-Z	I-Z	
Vocational maturity	III-F,G	VII-A to X	VII-A to X	Super, 1974*
Job dimensions of importance	III-E	III-E	III-E	
INFORMATION ABOUT ROTC/ARMY	-	IV-A	-	
BALANCE OF COSTS AND REWARDS OF JOINING ROTC				
Expected (or actual) rewards of ROTC	IV-A	IV-B	IV-A	Montgomery, et al., 1974**
Expected (or actual) costs of of ROTC	IV-A	IV-B	IV-A	Montgomery, et al., 1974**
Alternatives to ROTC	-	IV-V	IV-J	
NEW SECONDARY SOCIALIZATION CONDITIONS: COLLEGE AND ROTC PROGRAM EXPERIENCES				
Change in financial situation	IV-A(k)	II-E; IV-B(k),U	-	
Change in attitude of significant others	-	IV-B(f)	-	
Performance in college courses	-	II-D	II-D	
Participation in college extracurricular activities	-	II-F	II-E	
Performance in ROTC program and courses	-	IV-J,K	IV-H,I	
ROTC experiences: confirmation/ disconfirmation of expectancies	-	IV-B	IV-A,K	

BALANCE OF COSTS AND REWARDS OF ARMY CAREER				
Expected (or actual) job satisfaction in Army	-	III-E	III-E	Montgomery, et al., 1974**
Expected (or actual) rewards of Army	IV-B	IV-C	IV-B	Montgomery, et al., 1974**
Expected (or actual) costs of Army	IV-B	IV-C	IV-B	Montgomery, et al., 1974**
Alternatives to Army	-	-	III-D; IV-J	
NEW SECONDARY SOCIALIZATION CONDITIONS: ARMY EXPERIENCES				
Attitude of significant others	-	-	III-E(t)	
Performance in Army	-	-	IV-AA	
Satisfaction with Army job	-	-	III-E; IV-Z	Montgomery, et al., 1974**
Army experiences: confirmation/ disconfirmation of expectancies	-	-	IV-B	Montgomery, et al., 1974**
BALANCE OF COSTS AND REWARDS OF ARMY JOB	-	-	III-E; IV-B	
DECISION TO PARTICIPATE OR CONTINUE IN ROTC/ARMY	IV-C to E	IV-D to I,L to T	IV-C to G,L to Y	

*Only a subset of these items are from this source.
**Slightly adapted for purposes of present study.

to deal with planning beyond the high school level, and so it was omitted from the high school questionnaire; the section on deciding whether to go to college was only relevant to high school students, so it was omitted from the other two questionnaires.

Such item standardization was done primarily to allow for a cross-sectional analysis of inter-group and intra-group trend differences. For example, in a cross-sectional study such as the present one, comparisons between *expectations* about and *actual experiences* in ROTC/Army can only be made by comparing data from respondents at different stages of the career commitment process: from high school seniors intending to join ROTC; ROTC college freshmen, sophomores, juniors, and seniors; and Army officers with increasing years of service in the Army. Such comparisons are more valid if the data collected from each group are in the form of responses to the same, or very similar, questionnaire items.

The Selection of Respondents

The three populations of interest were: (a) high school seniors; (b) college students in schools offering ROTC; (c) ROTC-graduate Army officers serving their period of obligated Army service. The goal of the sampling effort was to come up with a stratified random sample of these populations, using stratification variables of interest to the study because of their potential impact on respondents' commitment to ROTC/Army. For the high school population the stratification variables were presence of a Junior ROTC (JROTC) program, and type of community. The latter stratification variable had three categories -- urban, suburban, and rural. Classification into the categories was based on community population as well as distance from major population centers.

The stratification variables for the college sample were: (a) ownership of school (public, private); (b) ROTC region in which the school was located (1, 2, 3, 4); and (c) size of school (small: less than 3,000 students; medium: 3000 - 12,000 students; large: over 12,000 students).

The Army officer sample was pulled from the population of ROTC-graduate officers commissioned between July 1970 and July 1974, who were in their period of obligated Army service. The sampling stratification variables for the Army officer group were: (a) Type of Army service (Regular Army;

Active Duty Reserve); (b) Possession of an ROTC scholarship in college (Scholarship; No scholarship); and (c) Period of obligated service (Early: first year of obligated service; Late: last six months of obligated service; Middle: all others).

The high school and college sampling unit was the school. The Army officer sampling unit was the individual officer.

Selection of High School Respondents

The goal of the high school sampling effort was to involve seniors from 12 high schools across the country in the study, with the schools stratified by presence of JROTC program and by type of community, as shown in the left half of Table 2.1.

TABLE 2.1

THE PROPOSED AND ACTUAL
HIGH SCHOOL SAMPLE

Location of School	Proposed Sample		Actual Sample	
	Presence of JROTC Program in School		Presence of JROTC Program in School	
	No. of Schools With JROTC	No. of Schools Without JROTC	No. of Schools With JROTC	No. of Schools Without JROTC
Urban	3	3	2	2
Suburban	2	2	4	2
Rural	1	1	1	1
Total	6	6	7	5

Names of high schools were drawn at random from two documents -- *Patterson's American Education,* 1974 for the non-JROTC school sample, and *Directory of ROTC/NDCC Units,* 1973 for the JROTC school sample. Three names were drawn for each of the six strata; the first name drawn was designated the first choice school; the last two were designated the first and second replacement schools, respectively. The original plan was that the replacement schools would only be invited to participate if the first choice school declined to participate. Figure 2.2 gives the list of high schools selected in this manner.

FIGURE 2.2

LIST OF HIGH SCHOOLS INCLUDED IN SAMPLING PLAN

Sampling Stratum		First Choice School	First Replacement School	Second Replacement School
Presence of JROTC Program	Type of Community			
JROTC	Urban	Long Beach Poly. H.S. Long Beach, Ca.	Harlandale Sr. H.S. San Antonio, Texas	Northwest H.S. Indianapolis, Ind.
JROTC	Urban	Austin H.S. El Paso, Texas	Trevor Brown H.S. Phoenix, Ariz.	College Park H.S. Atlanta, Ga.
JROTC	Urban	*Hollywood H.S. Hollywood, Ca.	G. W. Carver H.S. Montgomery, Ala.	Manual High Vocational School Kansas City, Mo.
JROTC	Suburban	*Cocoa Beach H.S. Cocoa Beach, Fla.	Blount H.S. Prichard, Ala.	*Fishburn Military School Waynesboro, Va.
JROTC	Suburban	Webb City H.S. Webb City, Mo.	*El Capitan H.S. Lake Side, Ca.	*San Marcus Baptist Academy San Marcus, Tex.
JROTC	Rural	*Greensboro H.S. Greensboro, Fla.	Tenn. M. I. Institute Sweetwater, Tenn.	R. E. Lee Institute Thomaston, Ga.
no JROTC	Urban	*Harlem H.S. Rockford, Ill.	Forest Road H.S. La Grange, Ill.	Wyandotte H.S. Kansas City, Ka.
no JROTC	Urban	Danvers H.S. Danvers, Mass.	T. W. Andrews Sr. H.S. High Point, N.C.	*Scotlandville H.S. Baton Rouge, La.
no JROTC	Urban	Natick H.S. Natick, Mass.	Denfeld H.S. Duluth, Minn.	N. E. Sr. H.S. Fort Lauderdale, Fla.
no JROTC	Suburban	Everett H.S. Maryville, Tenn.	Dallas H.S. Dallas, Ore.	William Fremd H.S. Palatine, Ill.
no JROTC	Suburban	Pittsburg Sr. H.S. North Campus Pittsburg, Ca.	*Frenship H.S. Wolfforth, Tex.	*Long Beach H.S. Long Beach, N.Y.
no JROTC	Rural	Perham Jr.-Sr. H.S. Perham, Minn.	Mabank H.S. Mabank, Tex.	*Quitman Cons. Dist. H.S. Quitman, Miss.

*Eventual participant schools

A letter was sent to the principal at each of the first choice schools, informing him/her about the purpose of the study, enclosing a copy of the survey questionnaire for his/her perusal, and requesting permission to administer the questionnaire to up to 200 of his/her high school seniors.

It proved somewhat difficult to get a quick response from the principals regarding their participation decision (often a district superintendent or a research board had to give personal approval to the study), so in the interest of time, letters of invitation were sent to the first and second replacement schools even before a response was obtained from the first choice school. The right half of Table 2.1 gives the actual number of high schools in each stratum that participated.

Urban high schools were underrepresented by two schools[2]. Suburban high schools with JROTC were overrepresented by two schools, but the extra schools were not dropped because one was a military high school and the other a very small, religiously oriented school, each of rather unique interest to the present study.

The make-up of the final high school sample is given in Tables 2.2 and 2.3, where numbers of respondents are given by sampling stratum and by name of school attended, respectively.

Table 2.2

DISTRIBUTION OF HIGH SCHOOL SENIOR RESPONDENTS ACROSS SAMPLING STRATIFICATION VARIABLES

Type of Community	Presence of JROTC Program in School		Total
	With JROTC	Without JROTC	
Urban	276	214	490
Suburban	239	247	486
Rural	32	81	113
Total	547	542	1,089

[2]It proved difficult to secure the cooperation of the urban schools drawn at random by the sampling procedures, probably because these schools are so swamped with similar requests for permission to survey students. Initially the urban school strata were underrepresented by three schools but one urban high school outside the initial sampling pool (Bowne, in Queens, New York) was contacted via personal channels and agreed to participate.

TABLE 2.3

DISTRIBUTION OF HIGH SCHOOL SENIOR RESPONDENTS, BY SCHOOL

Sampling Stratum		Name of School	Number of Answer Sheets Returned By Students	Number of Cases Rejected By Coder[d]	Number of Cases Rejected By Computer[e]	Final N
Presence of JROTC Program	Type of Community					
JROTC	Urban	Hollywood High School	141	5	8	128
		Scotlandville High School[a]	184	24	12	148
JROTC	Suburban	Coco Beach High School	43[c]	2	3	38
		Fishburne Military School	24	0	2	22
		El Capitan High School	155	8	9	138
		San Marcus Baptist Academy	44	2	1	41
JROTC	Urban	Greensboro High School	34	0	2	32
No JROTC	Urban	Harlem High School	158	14	21	123
		Bowne High School[b]	114	9	14	91
No JROTC	Suburban	Frenship High School	81	2	3	76
		Long Beach High School	204[c]	12	21	171
No JROTC	Rural	Quitman Cons. Dist. High School	94[c]	11	2	81
		TOTAL, All High Schools	1,276	89	98	1,089

[a]This school was initially classified as a non-JROTC school but in the course of data collection it was discovered that the school did have a JROTC program.

[b]This school was not in the initial sampling plan but was asked to participate to help the underrepresentation of urban schools.

[c]Students from this school took the questionnaire home overnight to fill out on a voluntary basis. Because of non-participation on the part of some students, this number is smaller than the total number of questionnaires actually distributed (average return rate among students taking the questionnaires home overnight = 52%). The total return rate among the high school sample is much higher than this, of course, because in nine of the high schools the questionnaire was administered in class to all students. Thus the overall return rate for the high school sample was 81%.

[d]Cases were rejected by project staff coders when respondents failed to fill out at least four of the questionnaire's seven sections.

[e]Cases were rejected by the computer when respondents either failed to answer at least half of the career commitment items, or respondents were obviously filling out the questionnaire haphazardly (e.g., no variance in response to attitudinal items despite the fact that items were worded in both favorable and unfavorable directions).

It must be pointed out that the quality of data provided by the high school senior respondent group was not as high as that for the college or Army officer groups. As Table 2.3 shows, 1,276 answer sheets were returned by students, but 187 or 14.7% of these were not included in the final sample, either because the respondent failed to complete at least four of the seven questionnaire sections, or because the computer detected insufficient or haphazard answering of the questionnaire by the respondent (see footnotes to Table 2.3).

Selection of College Respondents

As was the case with the high school sample, the sampling unit for the college group was the school. However, the population of interest for colleges was restricted to those campuses having an ROTC program, in order that comparisons could be made between ROTC and non-ROTC students at the same institution.

As previously mentioned, stratification variables for the colleges were: ownership of school, ROTC region in which the school was located, and size of school.

Inasmuch as there is an assumed precedence order among these three characteristics, a sequential branching rather than a simultaneous three dimensional sampling procedure was chosen. The first step in the procedure was to determine the percentage of total Army ROTC students in public vs. private schools. Second, within each of the above groups the percent of students in each ROTC region was determined; and lastly, within each region the percent of students in each school size was determined. The resultant branching "tree" is presented in Figure 2.3.

In Figure 2.3 the numbers in parentheses following the percentages give the number of sample schools falling in the branch. For example, looking at column 2, 73% of ROTC college students attend public colleges, 27% attend private colleges. Thus, seven of the 10 sample schools should be public, and three should be private. The last column gives the 10 branches with sufficient representation for inclusion in the sample.

Again, as with the high school sample, three schools in each target stratum were selected at random from the *Directory of ROTC/NDCC Units*, 1973. Figure 2.4 lists these schools. An eleventh college, North Georgia College, was added to the list of 10 first choice schools in order to include a

FIGURE 2.3

SAMPLING BRANCHES FOR COLLEGES AND UNIVERSITIES OFFERING ROTC

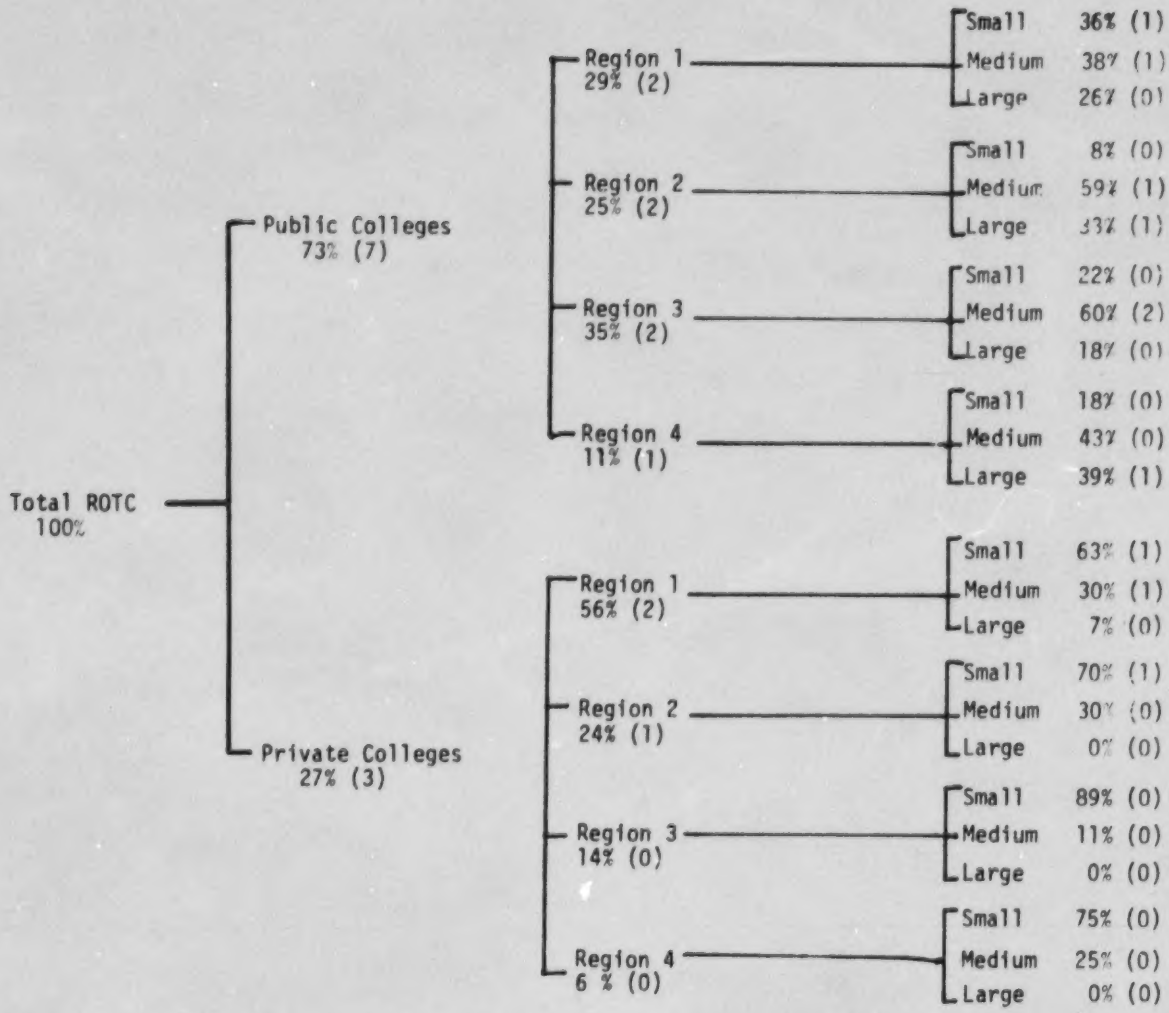


FIGURE 2.4

LIST OF COLLEGES INCLUDED IN THE SAMPLING PLAN

Sampling Stratum			First Choice School	First Replacement School	Second Replacement School
Size of School	ROTC Region	Ownership of School			
Small	1	Public	*So. Carolina State Coll. Orangeburg, S.C.[a]	*No. Georgia College[b] Dahlonega, Ga.	Virginia State College Petersburg, Va.
Medium	1	Public	Columbus College Columbus, Ga.	*Marshall University Huntington, W.Va.	Cornell University Ithaca, N.Y.
Medium	2	Public	*Eastern Kentucky U. Rickmond, Ky.	U. of Wisconsin Whitewater, Wis.	East Tennessee State U. Johnson City, Tenn.
Large	2	Public	Ohio University Athens, Ohio	*Western Illinois U. Macomb, Ill.	Central Michigan U. Mt. Pleasant, Mich.
Medium (School 1)	3	Public	*State Coll. of Arkansas Conway, Ark.	Northwestern State U. of Louisiana Natchitoches, La.	Cameron College Lawton, Okla.
Medium (School 2)	3	Public	*U. of Arkansas Fayetteville, Ark.	U. of Texas at El Paso, Tex.	So. U. A & M College[1] Baton Rouge, La.
Large	4	Public	*San Jose State U. San Jose, Ca.	Washington State U. Pullman, Wash.	U. of Colorado Boulder, Colorado
Small	1	Private	*Davidson College Davidson, N.C.	Alfred University Alfred, N.Y.	Washington & Jefferson Coll. Washington, Pa.
Medium	1	Private	LaSalle College Philadelphia, Pa.	*Carnegie-Mellon U. Pittsburgh, Pa.	St. John's University Jamaica, N.Y.
Small	2	Private	John Carroll U. Cleveland, Oh.	*Carson-Newman College Jefferson City, Tenn.	St. Norbert College West DePere, Wis.

[a]A traditionally Black college

[b]A military college considered as a "first choice school" to insure representation in the sample of military colleges.

*Eventual participant schools

predominantly military college in the sample.

The sampling plan for colleges was executed perfectly, thanks to the cooperation of the schools' Professors of Military Science. Seven of the eleven first choice colleges agreed to participate; for the four remaining strata, the first replacement school agreed to participate.

Tables 2.4 and 2.5 give the final breakdown of the college ROTC and non-ROTC samples, by sampling stratification variables and by school, respectively. Note from Table 2.5 that the data quality was much better for the college respondents than for the high school respondents. Only 80 of the original 1,713 respondents (4.7%; the corresponding figure for the high school sample was 14.7%) were eliminated from the final sample. This is of course due to the increased scholastic aptitude and sophistication of the college sample, and to their wider experience in responding to surveys of this type.

TABLE 2.4

DISTRIBUTION OF COLLEGE STUDENT RESPONDENTS
ACROSS SAMPLING STRATIFICATION VARIABLES

Year in School	Ownership/Size of School					Total
	Public			Private		
	Small	Medium	Large	Small	Medium	
	ROTC Students					
Freshmen	74	60	41	20	7	202
Sophomores	77	46	41	4	5	173
Juniors	75	50	27	21	3	176
Seniors	68	74	29	22	3	196
Missing Year						7
Total ROTC	294	230	138	67	18	754
	Non-ROTC Students					
Freshmen	27	140	63	89	2	321
Sophomores	24	52	14	71	2	163
Juniors	11	97	52	27	13	200
Seniors	8	75	51	27	13	174
Missing Year						21
Total Non-ROTC	70	364	180	214	30	879
GRAND TOTAL						1,633

TABLE 2.5

DISTRIBUTION OF COLLEGE STUDENT RESPONDENTS, BY SCHOOL

Sampling Stratum: Size of School	Sampling Stratum: ROTC Region	Sampling Stratum: Ownership of School	Name of School	Number of Answer Sheets Returned By Students	Number of Cases Rejected By Coder[b]	Number of Cases Rejected By Computer[c]	Final N
Small	1	Public	South Carolina State College	234[a]	22	6	206
Small	1	Public	North Georgia College	160	0	0	160
Medium	1	Public	Marshall University	80	2	1	77
Medium	2	Public	Eastern Kentucky University	236[a]	6	11	219
Large	2	Public	Western Illinois University	188	2	2	184
Medium	3	Public	University of Central Arkansas	172[a]	4	3	165
Medium	3	Public	University of Arkansas	155[a]	4	0	151
Large	4	Public	San Jose State University	138[a]	1	0	137
Small	1	Private	Davidson College	159[a]	6	1	152
Medium	1	Private	Carnegie-Mellon University	52[a]	2	0	50
Small	2	Private	Carson Newman University	139	5	2	132
			TOTAL, All Colleges	1,713	54	26	1,633

[a]College non-ROTC students at this school took the questionnaire home overnight to fill out on a voluntary basis. Because of non-participation on the part of some students, this number is smaller than the total number of questionnaires actually distributed (average return rate among students taking the questionnaire home overnight = 55%). The total return rate among the college sample is much higher than this, of course, because in four of the colleges the questionnaire was administered in class to all students. Moreover, in all the colleges except for Carnegie-Mellon University, ROTC cadets filled out the questionnaire in class. Thus, the overall return rate for the college sample was 75%.

[b]Cases were rejected by project staff coders when respondents failed to fill out at least four of the questionnaire's seven sections.

[c]Cases were rejected by the computer when respondents either failed to answer at least half of the career commitment items, or respondents were obviously filling out the questionnaire haphazardly (e.g., no variance in response to attitudinal items despite the fact that items were worded in both favorable and unfavorable directions).

Selection of Army Officer Respondents

The Army officer sample was selected from an Army personnel tape supplied to project staff by the project monitor. The personnel tape contained the names of 10,164 ROTC-graduate officers commissioned between July 1970 and July 1974. As previously mentioned, the Army officer sample was stratified on the basis of three variables: type of Army service, possession of an ROTC scholarship in college, and period of obligated Army service.

TABLE 2.6

DISTRIBUTION OF ARMY OFFICER TARGET POPULATION
(ROTC-GRADUATE OFFICERS COMMISSIONED
BETWEEN JULY 1970 AND JULY 1974)

Period of Obligation	Regular Army		Active Duty Reserve		Total
	No Scholarship (3-year Commitment)	Scholarship (4-year Commitment)	No Scholarship (2-year Commitment)	Scholarship (4-year Commitment)	
Early (1st year)	98	171	442	208	919
Middle	616	1,130	571	986	3,303
Late (last 6 mos.)	307	528	831	184	1,850
Unknown	446	170	3,447	29	4,092
Total	1,467	1,999	5,291	1,407	10,164
% of Grand Total	14.4	19.7	52.1	13.8	100.0

Table 2.6 gives the breakdown of Army officers in the population of interest, as gleaned from the personnel tape. A one-tenth sample was drawn from each of the 16 strata in Table 2.6 (the four cells with "Unknown" period of obligated service were included in the sampling procedure, because it was assumed that once men in these cells were contacted, they could provide information on the matter). Thus, 1,017 questionnaires were mailed out; of these, 200 were returned by the post office stamped "addressee moved; no forwarding address known," leaving 817 officers in the target sample. Of these, 646 returned complete, filled out questionnaires (a response rate of 79.1 %); two

returned incomplete questionnaires, and were not included in the data analysis. Twelve of the 646 completed questionnaires arrived after the cut-off date for responses and were likewise excluded from the data analysis. Thus the data presented in this report are based on an n of 634 officers. The high rate of response, coupled with the fact that only two Army officers who returned questionnaires had to be eliminated from the final sample (0.3%) speaks well for the impressively high quality of data gathered from the officer respondent group.

The make-up of the final Army sample is given in Table 2.7. Comparing the bottom rows of Tables 2.6 and 2.7, one notes that there is a slight overrepresentation (7.7%) of Active Duty Reserve Officers-with-Scholarship and a slight underrepresentation (10.8%) of Active Duty Reserve Officers-without-Scholarship. Regular Army officers were represented fairly proportionately in the final sample.

TABLE 2.7

DISTRIBUTION OF ARMY OFFICER FINAL SAMPLE

Period of Obligation	Regular Army		Active Duty Reserve		Total
	No Scholarship (3-year Commitment)	Scholarship (4-year Commitment)	No Scholarship (2-year Commitment)	Scholarship (4-year Commitment)	
Early (1st year)	20	25	75	45	165
Middle	47	57	111	59	274
Late (last 6 mos.)	35	49	73	31	188
Unknown					(7)
Total	102	131	259	135	627[a]
% of Grand Total	16.3	20.9	41.3	21.5	100.0

[a]This figure does not include the seven officers for whom data on one or more of the stratification variables was missing. Thus the total number of officers in the Army sample was 634.

Data Collection from the High School and College Samples

There was always one (and occasionally more than one) individual at each of the 23 participating high schools and colleges who served as the "contact" person for the project staff. The position of the individual varied from school to school. In the high schools it was generally the guidance counselor or the vice-principal. In the colleges it was generally the Professor of Military Science. These people contacted teachers, set up class time, and did numerous other logistic tasks to help the project staff. The success of the data collection is in a large part due to their assistance and cooperation.

The contact people at participating schools were asked how the data could best be collected at their institution: Would they or their designate prefer to do the job, or should AIR personnel visit the campus to administer the questionnaire? Contact people were also asked if class time could be provided for answering the questionnaire, or if students had to take the questionnaire home to fill out on their own time. Table 2.8 shows how contact people at the various schools responded. In general, AIR staff administered the questionnaires to the high school seniors; school personnel to college respondents. High school seniors and ROTC college students filled the questionnaire out in class, but non-ROTC college students filled the questionnaire out on their own time.

TABLE 2.8

SUMMARY OF DATA COLLECTION MODES
AT THE 12 PARTICIPATING HIGH SCHOOLS
AND THE 11 PARTICIPATING COLLEGES

Sample Group	Who Collected Data		How Data Were Collected	
	AIR Staff	School Staff	In Class	Overnight
High School	7	5	9	3
College (ROTC students)	1	10	10	1
College (non-ROTC students)	1	10	4	7

Data Collection from the Army Sample

Data collection from the Army officer sample was conducted by mail. Each of the selected officers was sent a copy of the questionnaire along with a cover letter, a prepaid postage return envelope, and a prepaid postage response-information postcard. The actual questionnaire was completed anonymously, but each respondent was requested to return the postcard which indicated that he either: (1) returned the completed questionnaire answer sheet, or (2) did not want to take part in the study. In this way project staff knew who participated in the survey, although not what their responses were. Approximately three weeks after the initial mailing, a follow-up mailing was sent to those officers who had not returned their response-information postcards. Two additional follow-up mailings, each after a three week interval, were sent. Each follow-up mailing contained a replacement questionnaire, in case the previous one(s) had been lost or thrown away.

Preliminary Data Analysis

This section describes the steps taken subsequent to receipt by project staff of filled-out answer sheets, but prior to the data analysis reported in the next seven chapters. These steps included: (a) data coding, clarification, keypunching, and checking; (b) creation of the computer data base; and (c) construction of the socio-psychological scale variables.

Data Coding, Clarification, Keypunching, and Checking

Coding of questionnaire data was minimal because respondents had recorded their responses on a one-page answer sheet in a form ready for direct transmittal to the keypunch agency (see Appendices D, E, and F) and because all questionnaire items had objective responses in the form of one or two-digit numbers.

Rigorous quality control measures were taken to insure the accuracy of the final data base. The following steps were taken for each answer sheet received:

1. One staff member inspected the answer sheet for completeness. Answer sheets in which fewer than four sections were completed were discarded.

2. If the answer sheet was reasonably complete (by the criterion given above), a unique identification number was stamped on it. The identification number included codes for: (a) respondent group (high school, college, Army); (b) school attended, if applicable; (c) a unique respondent number, determined by the order in which the answer sheet was received; (d) random assignment of the respondent to either the derivation or cross-validation group for purposes of subsequent regression analyses.

3. The answer sheet was made explicit -- i.e., unnecessary marks were erased, lead zeroes added to two digit answers, unclear responses gone over with a black pen -- in order to reduce potential keypunch errors.

4. A second staff member checked the first person's assignment of identification numbers and clarifications.

5. The data were sent to a local keypunch agency for keypunching and verifying (all 80 columns in all data cards were verified).

6. The keypunched cards were sorted by card number and respondent number and the data listed by computer. Two staff members checked the listing for number of cards and out-of-field punches.

7. Out-of-range and "haphazard answering" checks were carried out by computer algorithms.

Creation of the Computer Data Base

Data were then stored on a computer tape using the Statistical Package for the Social Sciences (SPSS) file format. SPSS is an integrated system of computer programs designed for the analysis of social science data. It allows great flexibility of data format and enables the user to perform a large set of data transformations, file manipulations, and statistical processing without much difficulty.

A separate file was produced for the high school, college, and Army officer data, because, as was previously mentioned, the contents of the three questionnaires varied slightly from one another (Appendices G, H, and I give the contents of the high school, college, and Army officer data files). Data common to all three questionnaires were then pooled into a fourth file to allow the conducting of the trend analyses described in Chapter 7.

Construction of the Socio-Psychological Scale Variable

Ten predictor scales and one criterion scale were constructed from sets of questionnaire items. The predictor scales were a socio-economic scale, an information about ROTC/Army scale, and eight socio-psychological attitude scales: need for fate control, bureaucratic tendencies, subscription to military ideology, anomy, career development (exploration stage), career development (establishment stage), attitudes towards ROTC, and attitudes towards the Army. The criterion scale was, of course, career commitment. Each of these eleven scales was constructed in a similar manner, as follows.

Commitment to ROTC/Army. The criterion of career commitment to the ROTC program and to the Army was measured by items that indicated either past behavior or future intentions related to membership in ROTC and pursuit of an Army officer career. The number of items used to construct the commitment scale varied with the respondent population: high school students, two items; college ROTC students, eight items; Army officers, seven items. The specific items used for each group are given in the first two columns of Table 2.9.

The following steps were taken to construct a career commitment scale score for each respondent:

1. All items making up the career commitment scale were scored in a single direction, so that the response option(s) reflecting highest commitment was given a score of 5; and the response option(s) reflecting lowest commitment was given a score of 1. For example:

"Do you intend to make a career of the Army?" (Item IV-S in career commitment scale for Army officers).

Answer	Original Code (Response No. in Questionnaire)	Score
Yes, definitely	1	5
Yes, probably	2	4
Undecided	3	3
No, probably not	4	2
No, definitely not	5	1

2. The sum of scores for all items making up a scale was computed.

3. This sum was multiplied by (Number of items in the scale/Number of items answered by the respondent) in order to correct for unanswered items,

TABLE 2.9

ITEMS AND SCORING SCHEME FOR COMMITMENT CRITERION SCALE

Item No.	Item	Original Code[a] (Response No. in Questionnaire)	Score[b]
	High School Students' Questionnaire		
IV-C	How likely are you to make a career of the Army?	1; 2; 3; 4; 5	Same
IV-D	Do you intend to join ROTC next year?	1; 2; 3; 4; 5; 6,7	5; 4; 3; 2; 1; 0 (missing)
	College ROTC Students' Questionnaire		
IV-D	How likely are you to make a career of the Army?[c]	1; 2; 3; 4; 5	Same
IV-F	Were you ever a member of Army ROTC?[c]	1; 2; 3; 4; 5; 6	5; 4; 3; 2; 1; 0 (missing)
IV-I	Do you intend to continue in ROTC next year?	1; 2; 3; 4; 5; 6	5; 4; 3; 2; 1; 0 (missing)
IV-N	Do you intend to remain in ROTC through the end of your senior year?	1; 2; 3; 4; 5;	5; 4; 3; 2; 1
IV-O	Which type of Army service are you planning for after college?	1,2; 3,4; 5,6; 7; 8	5; 4; 3; 2; 1
IV-Q	Do you intend to make a career of the Army?	1; 2; 3; 4; 5;	5; 4; 3; 2; 1
IV-S	After college, would you join the Army if you did not have any contractual obligations?	1; 2; 3; 4; 5	Same
IV-T	How many years do you intend to serve in the Army?	1; 2; 3; 4; 5; 6	1; 2; 3; 4; 5; 0 (missing)
	Army Officers' Questionnaire		
IV-C	How likely are you to make a career of the Army?	1; 2; 3; 4; 5	Same
IV-S	Do you intend to make a career of the Army?	1; 2; 3; 4; 5	5; 4; 3; 2; 1
IV-T	Do you intend to continue in the Army after you have served your contractual obligation?	1; 2; 3; 4; 5	5; 4; 3; 2; 1
IV-U	If yes, how many years beyond your contractual obligation do you intend to serve?	0 (missing); 1; 2; 3; 4	1; 2; 3; 4; 5
IV-V	How much are you looking forward to extending your Army service?	1; 2; 3; 4; 5	5; 4; 3; 2; 1
IV-W	How attached do you presently feel to the Army?	1; 2; 3; 4; 5	5; 4; 3; 2; 1
IV-Y	Assume you were free of contractual obligation. If a civilian job were offered to you next month at 20% increase over your present Army salary, would you accept the civilian job?	1; 2; 3; 4; 5	Same

[a] See the questionnaires in Appendices A, B, and C for the responses corresponding to these values.

[b] In scoring the items, a "5" was always assigned to the response category reflecting the highest commitment; a "1" to the response category reflecting the lowest commitment.

[c] This item was also answered by college students not in ROTC.

TABLE 2.10

ITEMS AND SCORING SCHEME FOR SES SCALE

Item No.	Original Code (Response No. in Questionnaire)	Score
I-G	1; 2; 3; 4; 5; 6,7	1; 2; 3; 4; 5; 6
I-H	1; 2; 3; 4; 5; 6	Same
I-I	1; 2; 3; 4; 5; 6	Same
I-J	1; 2; 3; 4,5; 6,7; 8; 9,10	1; 2; 3; 4; 5; 6; 0 (missing)
I-K	1; 2; 3; 4,5; 6,7; 8; 9,10,11	1; 2; 3; 4; 5; 6; 0 (missing)

Note. See the questionnaires in Appendices A, B, and C for the items and original questionnaire values.

if any. (This procedure is equivalent to assigning to each unanswered item the mean of the scores on answered items.)

For the career commitment scale, respondents had to answer at least one-half of the scale items. Otherwise, their case was eliminated from the data base.

A description of how the ten predictor scales were constructed follows. As previously mentioned, the procedure was quite similar to that described for the criterion scale. However, respondents were not automatically eliminated from the data base if they failed to provide information on these predictor scales.

Socio-economic status (SES). The SES scale consisted of five items measuring parents' income, father's and mother's education, and father's and mother's occupation. These items were scored so that all had a range of 1 to 6, with 6 representing the highest SES level. The items and the scoring key are given in Table 2.10.

The Other Predictor Scales. Nine other scales were computed from questionnaire items. These were: need for fate control, bureaucratic tendencies, military ideology, anomy, career development (exploration stage), career development (establishment stage), attitudes towards ROTC, attitudes towards the Army, and information about ROTC/Army. The definition of these scale variables and the hypotheses tying the scales to the criterion variable of commitment were given in Figure 1.3. Source of items for each scale was given in Figure 2.1. Table 2.11 gives the item make-up of the nine scales.

The scales were scored using the following procedure:

1. All items were scored in a single direction, as follows:

Name of Scale	Response Option given High Score (5)
Need for fate control	Response indicative of highest need
Bureaucratic tendencies	Response indicative of greatest bureaucratic tendencies
Military ideology	Response indicative of greatest subscription to military ideology
Anomy	Response indicative of highest anomy
Career development, exploration stage	Response indicative of greatest career development
Career development, establishment stage	Response indicative of greatest career development
Attitudes towards ROTC	Response most favorable to ROTC
Attitudes towards Army	Response most favorable to Army
Information about ROTC/Army	Correct response

TABLE 2.11

ITEMS AND SCORING SCHEME FOR SOCIO-PSYCHOLOGICAL SCALES

Name of Scale	Section of Questionnaire			Items in the Questionnaire[a]
	High School	College	Army	
Fate Control	VI	VI	VI	J, K, L, M, N, O
Bureaucratic Tendencies	VI	VI	VI	A,* B,* C,* D,* E,* F,* G,* H,* CC*
Military Ideology	VI	VI	VI	I,* U,*, V,* W,* X,* Y, Z, AA,* BB*
Anomy	VI	VI	VI	P,* Q,* R,* S,* T*
Career Development, Exploration	b	VII	VII	A, B, C, D, E, F, G, H, I, J, K, L
Career Development, Establishment	b	VII	VII	M, N, O, P, Q, R, S, T, U, V, W, X
Attitudes towards ROTC	IV-A	IV-B	IV-A	a,* b, c,* d,* e,* f, g,* h,* i,* j, k,* l,* m,* n,* o, p,* q,* r, s,* t,* u, v,* w,* x,* y, z*
Attitudes towards the Army	IV-B	IV-C	IV-B	a, b,* c, d,* e,* f,* g, h,* i,* j, k, l,* m, n,* o,* p, q,* r,* s, t,* u, v,* w, x,* y, z, aa (bb for Army), bb (cc for Army)
Information about ROTC/Army[c]	b	IV-A	b	a, b, c,* d,* e,* f, g,* h, i, j, k, l, m, n

Note. Refer to Appendices A, B, and C for the questionnaire items.

[a]All items except Information are coded from 1 to 5; those which were recoded for purposes of scale construction are indicated by an asterisk. The recoding always consisted of reversing the direction of the scale so that 1 = 5, 2 = 4, 3 = 3, 4 = 2, 5 = 1.

[b]This scale was not included in this questionnaire.

[c]Information items were scored 1 = 2 and 2 = 1 if an asterisk is next to the item. Missing values were counted as errors for the Information Scale items.

2. The sum of scores for all items making up a scale was computed.

3. This sum was multiplied by (Number of items in the scale/Number of items answered by the respondent) in order to correct for unanswered items, if any. (This procedure is equivalent to assigning to each unanswered item the mean of the scores on answered items.)

Reliability of the Predictor and Criterion Scales

The ten predictor scales and the criterion commitment scale were tested for reliability using the coefficient alpha statistic. The results of the reliability tests are presented in Table 2.12. As indicated in Table 2.12, coefficient alpha is computed using the number of scale items and the ratio of the sum of item variances to the total scale score variance. The scale reliabilities ranged from .34 to .86 for high school students, .45 to .92 for college students, and .51 to .93 for Army officers. The Fate Control Scale yielded the lowest reliability for all three samples, so caution appropriate for the reliability should be used in interpreting findings from this scale. (Note: This does not mean that the construct of fate control is unimportant, as Chapter 8 will show. The low reliability of the fate control scale is attributable in all probability to the generalized nature of the scale's items.) The commitment (criterion) scale's reliability is critical to the validity of the rest of the study, and it was reassuring that its reliability was above .70 for all groups.

TABLE 2.12

COEFFICIENT ALPHA RELIABILITY
FOR THE SCALE VARIABLES

Name of Scale	Number of Items in Scale	Coefficient Alpha		
		High School	College	Army
Criterion Scale:				
Commitment to ROTC/Army	(a)	.72	.82[c]	.93
Predictor Scales:				
Socio-economic Status	5	.83	.86	.83
Need for Fate Control	6	.34	.45	.55
Bureaucratic Tendencies	9	.83	.79	.72
Military Ideology	9	.57	.56	.51
Anomy	5	.61	.66	.60
Career Development, Exploration Stage	12	(b)	.92	.92
Career Development, Establishment Stage	12	(b)	.91	.90
Attitudes towards ROTC	26	.86	.86	.82
Attitudes towards the Army	28	.82	.89	.85
Information about ROTC/Army	14	(b)	.56	(b)

Note -- Coefficient alpha = $\frac{k}{k-1}\left(1 - \frac{\Sigma\sigma_i^2}{\sigma_y^2}\right)$

where: k = number of items in the scale

$\Sigma\sigma_i^2$ = sum of item variances

σ_y^2 = variance of total score

[a]The number of items for this scale varied from one group to the next as follows: High School = 2; College ROTC = 8; Army = 7.

[b]This scale was not administered to this group.

[c]Computed on ROTC members only, because non-ROTC students answered only two of the eight scale items.

CHAPTER 3

OVERVIEW OF ANALYTIC PROCEDURES

The goal of this chapter is to provide a framework with which the study's findings, reported in Chapters 4 through 8, can be viewed.

The chapters are organized around several major research questions of interest, as shown in Figure 3.1.

Figure 3.2 graphically represents the ROTC/Army career path and the various analyses used to understand the determinants of movement in and out of the path.

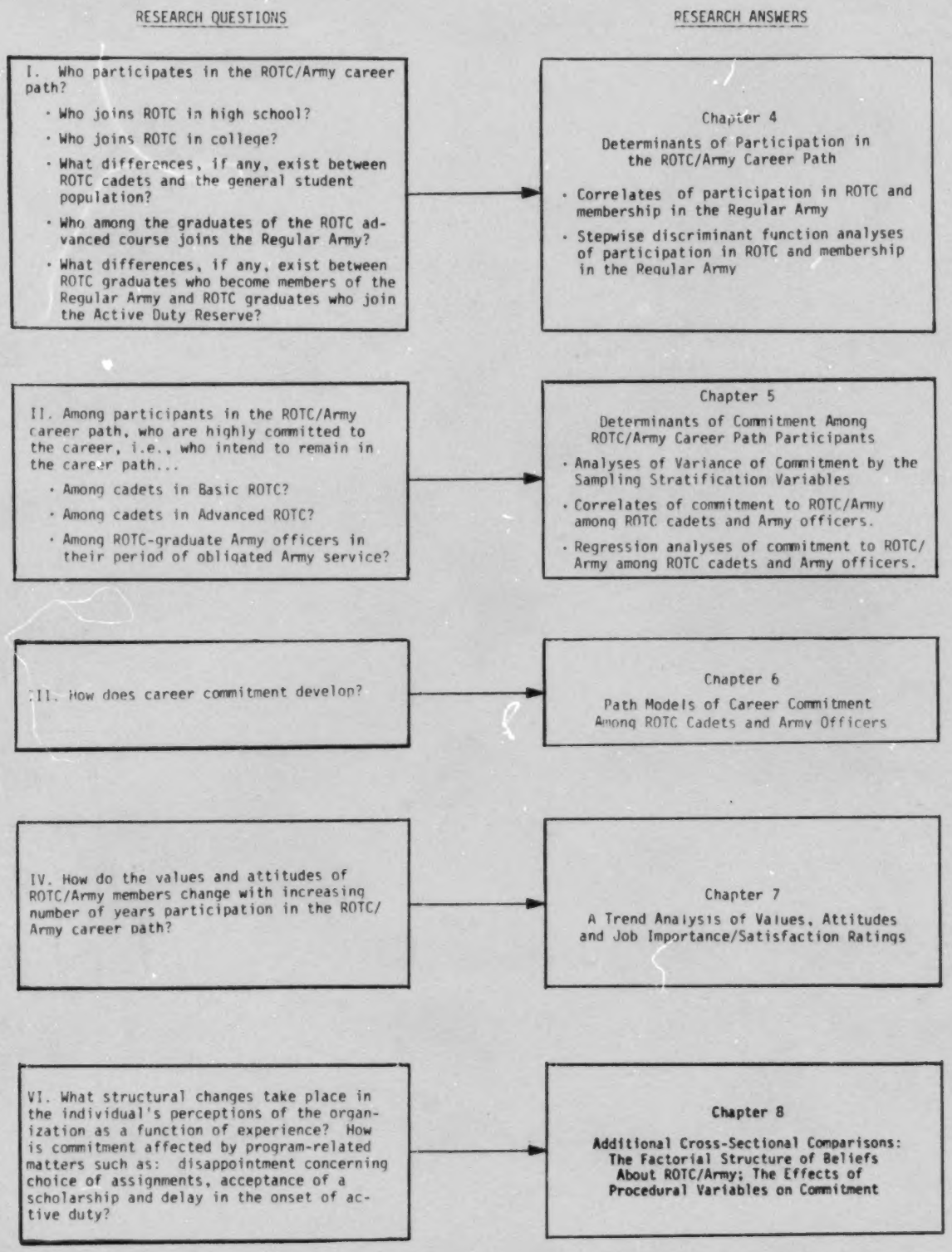
In Figure 3.2, respondent groups of interest are portrayed as circles. Groups (circles) inside the large center rectangle were included in the study's data collection design. The groups are divided according to whether they are in or out of the ROTC/Army career path of interest. Thus JROTC seniors, Basic and Advanced college ROTC cadets, and Army officers in their period of obligated service are all *participants* in the career path of interest; non-ROTC high school seniors and college freshmen, sophomores, juniors and seniors are all *non-participants*. Possible movement in and out of the career path is indicated by solid and dotted arrows, respectively. For example, JROTC seniors can either remain in the career path by joining Basic ROTC in college or can drop out of the career path by not going to college or by going to college but not joining ROTC. Note that cadets in Advanced ROTC are not free to drop out of the career path without going through their period of obligated Army service.

The analytic tools used to try to understand the ROTC/Army career commitment process are also shown in Figure 3.2. While the true career commitment process is *longitudinal* in nature -- occurring over time, involving continuous feedback between the individual and his/her career environment -- data in the present study were gathered at a single point in time, albeit from *cross-sectional* groups at different stages of the career continuum. The analyses reported in Chapters 4 to 8 represent an attempt to maximize longitudinal, process-related insights obtainable from the available cross-sectional data.

Two types of multivariate analyses were conducted. The first is represented by the discriminant analyses reported in Chapter 4 and the regression analyses reported in Chapter 5 (see Figure 3.2). As the term "discriminant"

Figure 3.1

OVERVIEW OF CHAPTERS 4 TO 8


RESEARCH QUESTIONS
RESEARCH ANSWERS
I. Who participates in the ROTC/Army career path?
• Who joins ROTC in high school?
• Who joins ROTC in college?
• What differences, if any, exist between ROTC cadets and the general student population?
• Who among the graduates of the ROTC advanced course joins the Regular Army?
• What differences, if any, exist between ROTC graduates who become members of the Regular Army and ROTC graduates who join the Active Duty Reserve?
Chapter 4
Determinants of Participation in the ROTC/Army Career Path
• Correlates of participation in ROTC and membership in the Regular Army
• Stepwise discriminant function analyses of participation in ROTC and membership in the Regular Army
II. Among participants in the ROTC/Army career path, who are highly committed to the career, i.e., who intend to remain in the career path...
• Among cadets in Basic ROTC?
• Among cadets in Advanced ROTC?
• Among ROTC-graduate Army officers in their period of obligated Army service?
Chapter 5
Determinants of Commitment Among ROTC/Army Career Path Participants
• Analyses of Variance of Commitment by the Sampling Stratification Variables
• Correlates of commitment to ROTC/Army among ROTC cadets and Army officers.
• Regression analyses of commitment to ROTC/Army among ROTC cadets and Army officers.
III. How does career commitment develop?
Chapter 6
Path Models of Career Commitment Among ROTC Cadets and Army Officers
IV. How do the values and attitudes of ROTC/Army members change with increasing number of years participation in the ROTC/Army career path?
Chapter 7
A Trend Analysis of Values, Attitudes and Job Importance/Satisfaction Ratings
VI. What structural changes take place in the individual's perceptions of the organization as a function of experience? How is commitment affected by program-related matters such as: disappointment concerning choice of assignments, acceptance of a scholarship and delay in the onset of active duty?
Chapter 8
Additional Cross-Sectional Comparisons: The Factorial Structure of Beliefs About ROTC/Army; The Effects of Procedural Variables on Commitment

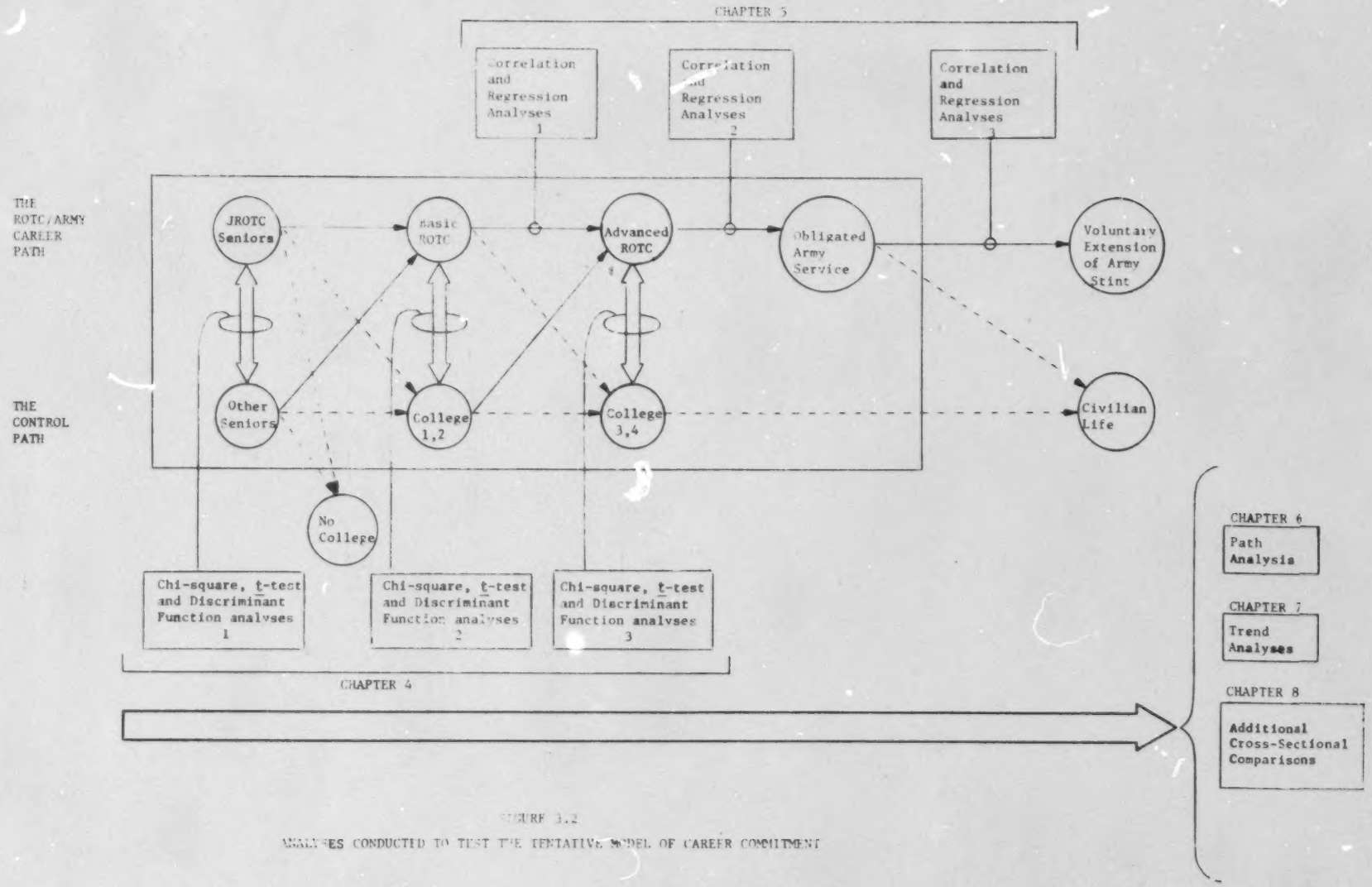


FIGURE 3.2

ANALYSES CONDUCTED TO TEST THE TENTATIVE MODEL OF CAREER COMMITMENT

connotes, the first set of multivariate analyses were conducted to isolate those variables that best correlate with participation in the ROTC/Army career path, i.e., those variables that distinguish the JROTC high school seniors, the cadets in Basic ROTC, and the cadets in Advanced ROTC from their non-ROTC peers. The regression analyses were conducted to isolate those variables that best correlate with participants' intention to remain in the ROTC/Army career path. These discriminant function and regression analyses may be viewed as *snapshots* of the career commitment process. Each picture is taken at a different time, and from a different angle. Together the series of pictures can be used to construct the larger longitudinal picture.

The analyses reported in Chapters 6 through 8 present another way of constructing the large picture from cross-sectional data. The path coefficient and trend analyses reported in these chapters portray a *moving picture* of the career commitment process (hence the large arrow in Figure 3.2). These analyses are not restricted in their time perspective to a single point in time, as were the discriminant function and regression analyses. Rather, they look at available data from a longer time perspective. In the path analyses the longer perspective is created from data gathered at a single point in time by making assumptions about the causal precedence among the variables. In the trend analyses the longer perspective is created from data gathered at a single point in time by assuming the comparability of the cross-sectional groups, and using the spread of the groups across the career stage continuum to simulate a longitudinal design.

We turn now to a brief overview of the remainder of the final report. Chapters 4 and 5 are closely related conceptually. In these chapters, the career commitment process in the young adult years is viewed as a sequential process starting out with "participation" in the career path and later establishing itself with "commitment" or intention to remain in the path. (These two stages correspond to Donald Super's second and third career development stages of "exploration" and "establishment." Super's first stage, "growth," is relevant to adolescents *younger* than the young adult populations of interest in the present study--adolescents to age 14. Super's last two stages, "maintenance" and "decline," are relevant to adults *older* than the present populations of interest.)

Chapter 4 will address the question: Who participates in the ROTC/Army career path? In Chapter 4 each variable cluster in the tentative model of career commitment will be examined to see whether differences in the cluster's

component items exist between: high school seniors not in JROTC vs. high school seniors in JROTC; college students not in ROTC vs. college students in ROTC; Army officers in the Active Duty Reserve vs. Army officers in the Regular Army.

By means of discriminant function analyses, Chapter 4 will then isolate those variables that best distinguish ROTC cadets from the general student population. These analyses will be carried out separately for: (a) high school students, (b) college students in the first two years of college, and (c) college students in the last two years of college, as Figure 3.2 shows.

In Chapter 5 the focus will shift from trying to isolate the differences between participants and non-participants in the career path to trying to isolate determinants of participants' commitment to remaining in the career path. First, the relationship between the structural school stratification variables (such as size and location of school) and commitment will be examined. Then, as was the case in Chapter 4, each of the tentative model's variable clusters will be examined for its relationship to the criterion. Finally, a series of regression analyses will be used to try to isolate the most important determinants of commitment at the Basic ROTC, Advanced ROTC, and young Army officer career stages (see Figure 3.2).

Chapter 6 will build directly on Chapter 5. It will look at the most salient predictors of commitment among the ROTC cadet and Army officer groups, make assumptions about the causal ordering of these predictors, and compute path coefficient models of the commitment process.

Chapters 7 and 8 will then present trend analyses which use the cross-sectional groups as simulations of a single longitudinal design. These chapters will investigate how ROTC and the Army change an individual's value and attitudinal profile (Chapter 7) and commitment to ROTC/Army (Chapter 8).

Finally, Chapter 9 will integrate the findings reported in Chapters 4 through 8 into implications of the study for a general model of career commitment, for improvement of the ROTC and Army programs, and for future research in the area of ROTC/Army career commitment.

CHAPTER 4

DETERMINANTS OF PARTICIPATION IN THE ROTC/ARMY CAREER PATH

The main questions addressed in this chapter are: (a) Who joins ROTC in high school? Who joins ROTC in college? What demographic and socio-psychological differences, if any, exist between ROTC cadets and the general student population? (b) Of those graduates of the ROTC Advanced Course, who joins the Regular Army? What differences, if any, exist between ROTC graduates who become members of the Regular Army and ROTC graduates who join the Reserves? In short, this chapter addresses itself to the general issue of participation in the ROTC/Army career path.

Definition of Career Path Participants

Only a small portion of the student sample *not* in high school JROTC or in college ROTC intend to make a career of the Army (2.6% of non-JROTC high school seniors and 1.6% of non-ROTC college students). Hence, these groups can aptly be characterized as "non-participants" in the ROTC/Army career path. The career intention difference is not as striking for the Active Duty Reserve versus Regular Army officers: 21% of Reservists intend to make a career of the Army versus 39.1% of Regular Army members. Thus, Reservists are not really "non-participants" the way members of the general student population are, and we hypothesize that the differences in the demographic and socio-psychological profile of the two Army officer groups will not be as striking as the differences between the ROTC and non-ROTC students.

In addition, we hypothesize that differences found between ROTC participants and the general student population will be more marked for the college than for the high school sample. This is so because the college participants are further along the career continuum: 30% of college ROTC cadets intend to make a career of the military versus only 13.7% of the high school JROTC cadets.

Differences in the Demographic and Socio-Psychological Profile of Participants Versus Non-Participants: A Summary of the Scope of Differences Found

Table 4.1 presents the variables encompassed by the tentative model of career commitment (Figure 1.2) and summarizes findings that will be reported in detail in subsequent sections, regarding the differences on each of the model's variables between: high school members of JROTC and members of the general high school senior population; college members of ROTC and members of the general college population; members of the Regular Army and members of the Active Duty Reserve.

The third column of Table 4.1 indicates that there were 204 variables analyzed; 41 of these were not applicable to the high school group (either because the sample was stratified on the variable or because the item measuring the variable was not asked of the high school group in their survey questionnaire); six were not applicable to the college group; three were not applicable to the Army officer group. Thus, the total number of applicable variables analyzed for each respondent group was as follows: High school, 163; College, 198; Army, 201.

Columns 5, 7, and 9 of Table 4.1 give the number of variables in each cluster that were significantly related to participation in high school JROTC, to participation in college ROTC, and to membership in the Regular Army. From column 5 we see that significant ($p \leq .05$) differences between high school JROTC members and non-JROTC high school seniors were found on 66 of the 163 variables studied, a successful discrimination rate of 40.5%. As hypothesized, the discrimination rate for College ROTC versus non-ROTC members was much higher than this (145/198 or 73.2%); that for Regular Army versus Active Duty Reserve officers was much lower (44/201 or 21.9%). Indeed, the differences between participants and non-participants in a career path become more pronounced as participants progress farther along the career path (high school versus college data). Also, subgroup differences among participants are not as pronounced as intergroup differences between participants and non-participants (Army officer versus high school/college data).

Table 4.1 gave the overall picture regarding correlates of participation in the ROTC/Army career path. The next few sections will be devoted to a detailed examination of the individual correlates. Each of the variables

TABLE 4.1

SUMMARY OF THE EXTENT TO WHICH VARIABLE CLUSTERS IN THE CAREER COMMITMENT MODEL WERE RELATED TO PARTICIPATION IN ROTC AND MEMBERSHIP IN THE REGULAR ARMY

Box No. in Tentative Career Commitment Model	Name of Variable Cluster	Total Number of Variables in Cluster	HIGH SCHOOL SENIORS		COLLEGE STUDENTS		ARMY OFFICERS		Table Reference
			No. of Applicable Variables[a]	No. of Variables Significantly Related to Participation in JROTC	No. of Applicable Variables[a]	No. of Variables Significantly Related to Participation in ROTC	No. of Applicable Variables[a]	No. of Variables Significantly Related to Membership in the Regular Army	
1	Demographic Variables	16	11	5	12	2	15	2	4.2
1	Father's Military Experience	2	2	1	2	2	2	0	4.3
1	ROTC and Military Experience of Other Family and Friends	10	10	4	10	5	10	0	4.3
3	Contact with Military Families	2	2	1	2	2	2	0	4.3
3	Parents' and Friends' Military Attitudes	4	4	3	4	4	4	2	4.3
1	Family Stability	2	2	0	2	2	2	0	4.4
2	Aptitudes and Achievement	8	7	1	8	6	8	2	4.5
3	College Major	2	2	0	1	0	2	0	4.6
3	Participation in Extracurricular Activities	11	1	1	10	5	11	1	4.7
4	Personal Values	14	14	7	14	10	14	6	4.8
4	Careers Being Considered	15	15	3	15	6	15	2	4.9, 4.10
4	Interests and Aspirations	10	10	1	10	8	10	1	4.11
5	Importance Ratings, Job Dimensions	21	21	3	21	11	21	8	4.12
7, 11, 14	Army Satisfaction Ratings, Job Dimensions	21	0	-	21	20	21	6	4.13
5	Socio-Psychological Scales	8	6	4	8	8	8	3	4.14
5	Political Position	1	1	0	1	1	1	0	4.14
6	ROTC and Army Information Tests	2	0	-	2	2	0	-	4.15, 4.16
7, 9	Beliefs about ROTC	26	26	17	26	23	26	6	4.17
7, 11, 14	Beliefs about the Army	29	29	15	29	28	29	5	4.18
	TOTAL	204	163	66	198	145	201	44	
	% OF APPLICABLE VARIABLES RELATED TO PARTICIPATION		40.5%		73.2%		21.9%		

[a] Some variables were not applicable to a group either because the sample was stratified on the variable or because the variable was not included in the group's questionnaire.

within the tentative model's clusters listed in Figure 1.2 and Table 4.1 will be evaluated for its ability to discriminate ROTC participants from among the high school and college students, and members of the Regular Army from among the Army officer sample.

Before proceeding to the detailed analysis, several points must be made to put the findings-to-be-discussed in perspective:

1. Many of the findings to be reported replicate previous investigators' work in the area of career commitment (refer to Figure 1.3 for a summary of how many of the tentative model's variables were chosen because previous investigators had found them to be relevant to the career commitment process). The unique contribution of the present study lies in the attempt to construct the over-all picture of ROTC/Army career commitment, to integrate previously scattered findings into a single model tested with various multivariate analyses.

2. Because all the data to be reported were gathered at a single point in time, all findings to be reported have concurrent, but not necessarily predictive, validity. Only a longitudinal study can demonstrate whether correlations found in the present study between the "predictor" variables and the criterion variables of participation and commitment hold up when the predictors are measured at a point in time prior to measurement of the criterion.

3. Successive analyses will be reported, starting with bivariate relationships between the predictor and criterion variables and progressing to integrative multivariate analysis. The bivariate relationships (chi-squares, t's, correlations) are essential to obtaining a feel for the over-all commitment process and to structuring and interpreting the integrative analyses (e.g., the path model of commitment discussed in Chapter 6). However, it must be borne in mind that, in a study with an "n" as large as the present one, some minor relationships reach statistical significance. For example, correlations $\geq .07$ are significant at the .05 level. These relationships at the .05 level explain very little (less than 1%) of the variance in the criterion; moreover, 5% of them would be significant even if chance alone were operating. These relationships are discussed in the text for the sake of completeness, but their importance to the career commitment process should be interpreted with caution unless they replicate or will be replicated by other studies. Findings significant at the .01 and .001 levels are obviously on much stronger ground.

4. Also for the sake of completeness and to give the interested reader a feel for the distribution of questionnaire responses across respondent groups, detailed information is provided in the tables accompanying this and the next chapter. The casually interested reader does not need to examine these tables. Their message is contained in the text.

Participants vs. Non-Participants: Their Demographic Profile[3]

The discussion now turns to the relationship between the tentative model's predictor clusters and (a) participation in ROTC; (b) membership in the Regular Army. The first variable cluster listed in Table 4.1 was demographic profile. There were 16 demographic variables in the questionnaire: sex, race, marital status, socio-economic status, year in school (college students only), region of socialization, type of community in which grew up, religion, age, number of brothers, number of sisters, number of older brothers, number of older sisters, number of children (married college students and Army officers only), father's birthplace (U.S. or not), and mother's birthplace.

Table 4.2 presents the distribution on these 16 variables of high school seniors not in JROTC versus high school seniors in JROTC; college students not in ROTC versus college students in ROTC; and Army officers in the Active Duty Reserve versus Army officers in the Regular Army. Differences between groups are evaluated for significance by means of the chi-square statistic (for the nominal variables sex through religion and father's/mother's birthplace in the list above) or the t-test for the difference between means (for the ordinal variables age through number of children).

Significant differences were found between JROTC and non-JROTC high school seniors on the following variables:

1. Sex. JROTC students were disproportionately male ($p < .001$);

2. Socio-economic status. A greater proportion of JROTC students came from the upper socio-economic brackets ($p < .01$);

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[3]Two high school respondents did not identify themselves with respect to JROTC membership. One Army officer did not say whether he was a member of the Regular Army or the Active Duty Reserve. Data from those three respondents are thus not included in this chapter's tables.

TABLE 4.2

DEMOGRAPHIC PROFILE OF SURVEY RESPONDENTS,
BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

DEMOGRAPHIC VARIABLES	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
Sex			$\chi^2(1)$= 35.19***			$\chi^2(1)$=252.61***			$\chi^2(1)$= NS
% Male	45.1	76.5		53.0	89.4		100.0	100.0	
% Female	54.9	23.5		47.0	10.6		0.0	0.0	
Race			NA[a]			NA[a]			$\chi^2(5)$= 14.72*
% White	65.1	51.0		86.3	75.6		84.3	86.7	
% Black	22.5	30.4		11.2	21.5		10.8	6.0	
% Chicano	5.3	3.9		0.3	0.8		3.5	3.0	
% Indian	0.7	0.0		0.2	0.7		0.0	0.9	
% Oriental	3.1	7.8		0.8	0.9		0.3	2.6	
% Other	3.4	6.9		1.1	0.5		1.3	0.9	
Marital Status			$\chi^2(4)$= NS			$\chi^2(4)$= NS			$\chi^2(3)$= NS
% Single	90.1	91.2		82.4	84.2		39.0	33.5	
% Engaged	7.5	4.9		5.9	6.9		3.3	1.7	
% Married	1.8	2.9		10.7	8.2		56.0	61.4	
% Separated/Divorced	0.3	1.0		0.8	0.7		1.8	3.4	
% Widowed	0.2	0.0		0.1	0.0		0.0	0.0	
Socio-Economic Status[b]			$\chi^2(5)$ 18.50**			$\chi^2(5)$= NS			$\chi^2(5)$= NS
%, 1 (Low)	2.1	3.9		1.3	0.9		1.0	0.4	
%, 2	14.2	13.7		9.9	12.5		8.3	8.6	
%, 3	27.7	16.7		21.3	20.4		24.3	28.3	
%, 4	32.6	25.5		28.4	27.7		31.0	29.2	
%, 5	18.0	28.4		27.0	28.2		27.0	28.8	
%, 6 (High)	5.4	11.8		12.2	10.2		8.5	4.7	
Year in School			NA			NA[a]			NA
%, Freshman				27.0	37.4				
%, Sophomores				23.2	19.0				
%, Juniors				23.6	23.3				
%, Seniors				26.2	20.3				
Region of Socialization[c]			NA[a]			NA[a]			$\chi^2(5)$= NS
%, East	24.7	4.9		7.9	4.4		18.0	22.3	
%, Midwest	14.0	5.9		20.9	11.6		21.6	18.9	
%, West	20.1	7.8		5.2	10.5		11.6	9.5	
%, South	31.9	71.6		62.0	65.3		38.8	40.4	
%, Foreign Country	5.8	3.9		1.1	0.7		1.8	0.4	
%, Several Regions	3.4	5.9		2.8	7.6		8.5	8.6	
Type of Community in Which Grew Up			NA[a]			NA[a]			$\chi^2(4)$= NS
%, Rural	11.1	9.8		22.5	21.4		13.8	14.6	
%, Small City/Town	38.2	51.0		33.9	34.4		35.1	34.8	
%, Medium City	18.0	7.8		18.0	20.1		21.8	22.3	
%, Suburb	10.8	11.8		15.8	15.6		16.5	18.0	
%, Large City	21.9	19.6		10.0	8.5		12.8	10.3	
Religion			$\chi^2(4)$= 15.97**			$\chi^2(4)$= 15.80*			$\chi^2(4)$= NS
%, Catholic	23.4	14.7		17.9	13.3		28.3	31.8	
%, Protestant	26.3	38.2		66.1	66.6		59.9	61.4	
%, Jewish	12.0	3.9		0.9	0.1		1.8	0.4	
%, Other	31.6	39.2		12.6	16.7		7.5	5.2	
%, None	6.7	3.9		2.5	3.3		2.5	1.3	
Mean, Age of Respondents	17.5	17.7	t= 2.71**	20.5	20.3	t= NS	24.4	24.7	t= NS
Mean, Number of Brothers	1.6	1.5	t= NS	1.4	1.5	t= NS	1.4	1.3	t= NS
Mean, Number of Sisters	1.6	2.0	t= 2.67**	1.4	1.4	t= NS	1.3	1.3	t= NS
Mean, Number of Older Brothers	0.9	0.9	t= NS	0.7	0.6	t= NS	0.5	0.4	t= NS
Mean, Number of Older Sisters	0.8	1.0	t= NS	0.6	0.7	t= NS	0.5	0.4	t= NS
Mean, Number of Children (married respondents only)			NA	0.1	0.1	t= NS	0.3	0.4	t= 2.15*
% with Foreign-Born Fathers	15.4	19.8	$\chi^2(1)$= NS	3.1	2.7	$\chi^2(1)$= NS	5.8	6.9	$\chi^2(1)$= NS
% with Foreign-Born Mothers	17.5	18.6	$\chi^2(1)$= NS	3.9	5.6	$\chi^2(1)$= NS	6.0	6.4	$\chi^2(1)$= NS

Footnotes are on next page.

Table 4.2 (continued)

Note.

1. Due to missing values, the number of respondents on which percentages and means reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

2. The number in parenthesis following the chi-square statistic ($\underline{X}^2$) is the degrees of freedom on which the significance of $\underline{X}^2$ was evaluated.

[a]Chi-square was not computed to test the significance of the ROTC vs. non-ROTC differences on Race, Year in School, Region of Socialization, Type of Community in Which Grew Up because the sample was stratified on these variables (i.e., the college pool included a Black school and a military school; the high school pool included a military high school in the south with all respondents in JROTC). Thus the distribution of respondents on these three variables is not generalizable to the total country ROTC vs. non-ROTC population.

[b]Socio-economic Status was computed as a composite of five variables: Parents' Income, Father's Education, Mother's Education, Father's Occupation, and Mother's Occupation. Scoring of this and all other scale variables was described in **Chapter 2**.

[c]Region of Socialization was gleamed from the following questionnaire item: "Where did you spend the majority of your elementary and high school years?"

East:	1.	New England (Maine, New Hampshire, Massachusetts, Connecticut, Rhode Island, Vermont)
	2.	Middle Atlantic (New York, New Jersey, Pennsylvania)
Midwest:	3.	East North Central (Ohio, Indiana, Illinois, Michigan, Wisconsin)
	4.	West North Central (Minnesota, Iowa, Missouri, North Dakota, South Dakota, Nebraska, Kansas)
West:	5.	Mountain (Montana, Idaho, Wyoming, Colorado, New Mexico, Arizona, Utah, Nevada)
	6.	Pacific (Washington, Oregon, California, Alaska, Hawaii)
South:	7.	South Atlantic (Delaware, Maryland, District of Columbia, Virginia, West Virginia, South Carolina, North Carolina, Georgia, Florida)
	8.	East South Central (Kentucky, Tennessee, Alabama, Mississippi)
	9.	West South Central (Arkansas, Louisiana, Oklahoma, Texas)
Foreign Country:	10.	Didn't grow up in the United States
Several Regions:	11.	Moved around too much to consider myself from any one region

*$\underline{p}$ < .05
**$\underline{p}$ < .01
***$\underline{p}$ < .001

3. Religion. JROTC students were disproportionately Protestant or members of a religion other than Catholicism, Protestantism, or Judaism ($p < .01$);

4. Age. JROTC students were older than non-JROTC students ($p < .01$);

5. Number of sisters. JROTC students had a greater number of sisters than non-JROTC students ($p < .01$).

Significant differences were also found between the JROTC and non-JROTC groups on race, region of socialization and type of community in which they grew up, with JROTC members being disproportionately Black, and coming disproportionately from a small city/town in the south. However, these differences were undoubtedly caused, at least to some extent, by stratification of the sample on these variables (e.g., the high school pool included a military high school in the south with all respondents in JROTC), hence these findings may be attributable to sampling characteristics rather than to "real" differences between the JROTC and non-JROTC groups.

Of the 12 applicable demographic variables, only two -- sex and religion -- were significantly related to participation in college ROTC, with ROTC college cadets tending to be disproportionately male ($p < .001$)[4] and to list their religion as "other" ($p < .05$). Only two significant differences ($p < .05$) were found in the demographic profile of members of the Regular Army versus members of the Active Duty Reserve: A disproportionately larger percentage of Regular Army officers were white; a disproportionately larger number of Reservists were black. Also, Regular Army members had more children than Reservists.

Two things are worth noting about these demographic-related findings: (a) This variable cluster was the only one for which a greater number of significant differences between the ROTC and non-ROTC groups were found for the high school, as opposed to college, sample; (b) For the college and Army samples, this cluster had one of the *lowest* successful discrimination rates among the clusters in the model. As described in the previous paragraph, almost no demographic differences were found between ROTC college cadets and the general college student population and between members of the Regular Army and members of the Active Duty Reserve.

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[4] This finding is certainly related to the structure of the ROTC program: females were not admitted into college ROTC programs before 1972.

With regards to the first issue, a further investigation was made into whether some of the demographic differences obtained between the JROTC cadets and the general high school population might be attributed to the fact that the high school sample included schools *not* offering JROTC (as opposed to the college sample which was drawn completely from schools with an ROTC program). The demographic profile of high school students in schools without JROTC was contrasted with the profile of high school students in schools with JROTC. As expected, significant differences between the school samples were found in the sampling stratification variables of race, region of socialization, and type of community in which a student grew up. However, of the six variables that significantly differentiated JROTC cadets from the other high school students, only one (religion) was also significant in this analysis-by-school. Thus, the more diverse sampling universe for the high school group does not appear to be the explanation for the greater demographic difference between ROTC cadets and the general student population at the high school, as opposed to college, level. As we shall see in the remainder of this section, *socio-psychological* differences between cadets and the general student population (values, motivations, attitudes) are much more pronounced in college than in high school, despite the greater demographic homogeneity of the college sample. This implies that career participation and commitment are determined much more heavily by a person's values and attitudes than by his/her demographic characteristics, especially at the college level; consequently, it is important that recruitment and selection focus on these socio-psychological variables.

Participants vs. Non-Participants: The Military Experience and Attitudes of their Family and Friends

The next variable cluster examined was the military background of respondents. This included the primary socialization variables (Box 1 in tentative career commitment model, Figure 1.2) of father's military experience and military experience of other family and friends, and the secondary socialization variables (Box 3 in career commitment model, Figure 1.2) of contact with military families and parents' and friends' military attitudes. Table 4.3 presents the data gathered on these variables.

A pronounced career modelling effect was found: (a) 30.8 and 37.6%

TABLE 4.3

MILITARY EXPERIENCE AND ATTITUDES OF FAMILY AND FRIENDS, BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

MILITARY SOCIALIZATION VARIABLES	RESPONDENT GROUP: HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
FATHER'S MILITARY EXPERIENCE									
Father's Military Experience			$\chi^2(4)$= 10.50*			$\chi^2(4)$= 17.77**			$\chi^2(4)$= NS
%.None	37.5	44.0		27.4	22.0		21.4	21.6	
%.Army	30.8	34.0		37.6	45.3		51.0	50.5	
%.Air Force	7.7	10.0		10.3	13.0		8.5	9.5	
%.Navy	15.8	4.0		19.7	15.1		14.6	15.5	
%.Other Military	8.0	8.0		5.0	4.6		4.5	3.0	
Length of Father's Military Experience			$\chi^2(4)$= NS			$\chi^2(4)$= 82.66***			$\chi^2(4)$= NS
%. Not at all	37.1	44.4		26.3	21.8		21.4	21.1	
%. Less than 5 years	45.7	34.3		60.0	48.1		55.0	47.8	
%. 5-10 years	9.2	12.1		7.3	8.4		5.3	6.5	
%. 11-15 years	1.1	1.0		0.6	1.6		1.0	1.3	
%. Over 15 years	7.1	8.1		5.9	20.1		17.3	23.3	
ROTC AND MILITARY EXPERIENCE OF OTHER FAMILY AND FRIENDS									
% with Siblings in ROTC	11.4	20.2	$\chi^2(1)$= 5.62*	10.5	15.1	$\chi^2(1)$= 7.34**	20.5	18.5	$\chi^2(1)$= NS
% with Cousins in ROTC	23.5	35.4	$\chi^2(1)$= 6.24*	23.2	24.9	$\chi^2(1)$= NS	21.8	20.8	$\chi^2(1)$= NS
% with Uncles in ROTC	22.1	26.5	$\chi^2(1)$= NS	15.7	19.2	$\chi^2(1)$= NS	11.7	12.7	$\chi^2(1)$= NS
% with Grandparents in ROTC	8.3	10.2	$\chi^2(1)$= NS	4.0	5.9	$\chi^2(1)$= NS	1.3	1.3	$\chi^2(1)$= NS
% with Good Friends in ROTC	38.6	64.6	$\chi^2(1)$= 24.09***	49.3	61.9	$\chi^2(1)$= 25.26***	67.4	61.3	$\chi^2(1)$= NS
% with Siblings in Military	18.3	21.6	$\chi^2(1)$= NS	19.0	25.8	$\chi^2(1)$= 10.16**	30.5	29.6	$\chi^2(1)$= NS
% with Cousins in Military	46.7	49.0	$\chi^2(1)$= NS	58.9	63.0	$\chi^2(1)$= NS	62.3	58.0	$\chi^2(1)$= NS
% with Uncles in Military	52.2	53.5	$\chi^2(1)$= NS	71.3	73.9	$\chi^2(1)$= NS	70.7	70.0	$\chi^2(1)$= NS
% with Grandparents in Mil	30.6	33.0	$\chi^2(1)$= NS	34.9	41.2	$\chi^2(1)$= 6.41**	32.0	32.2	$\chi^2(1)$= NS
% with Good Friends in Mil.	56.1	69.1	$\chi^2(1)$= 5.57*	75.0	84.0	$\chi^2(1)$= 19.36***	83.5	78.4	$\chi^2(1)$= NS
RESPONDENT'S CONTACT WITH MILITARY FAMILIES									
% with Contact While Growing Up	35.2	37.6	$\chi^2(1)$= NS	24.5	40.4	$\chi^2(1)$= 46.68***	27.8	26.6	$\chi^2(1)$= NS
% with Contact at Present	50.7	81.0	$\chi^2(1)$= 32.34***	57.6	87.6	$\chi^2(1)$=177.38***	97.0	97.4	$\chi^2(1)$= NS
PARENTS' AND FRIENDS' MILITARY ATTITUDES									
Mean, Friends' Opinion of Military [a]	2.75	2.78	t= NS	2.56	2.78	t= 3.77***	2.90	3.42	t=4.76***
Mean, Friends' Rating of an Army Officer Career [b]	2.69	3.13	t= 2.26*	2.81	3.25	t= 8.78***	3.29	3.49	t=2.55*
Mean, Parents' Opinion of Military [a]	3.34	3.69	t= 2.75**	3.59	4.10	t= 9.14***	4.35	4.35	t= NS
Mean, Parents' Rating of an Army Officer Career [b]	3.31	3.70	t= 3.22***	3.47	4.09	t= 12.84***	4.22	4.32	t= NS

Note.

1. Due to missing values, the number of respondents on which percentages and means reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

2. The number in parenthesis following the chi-square statistic (χ^2) is the degrees of freedom on which the significance of χ^2 was evaluated.

3. Parents' and friends' military attitudes are all as perceived by respondents.

[a] 1 = Predominantly negative; 5 = Predominantly positive

[b] 1 = Very low status; 5 = Very high status

*$p < .05$; **$p < .01$; ***$p < .001$

of non-ROTC high school and college students had fathers who had served in the Army. For ROTC/Army career path participants the figures were higher: 34.0% for high school JROTC cadets; 45.3% for College ROTC cadets; 50-51% for Army officers; (b) 5.9% of non-ROTC college students had fathers with a military *career* (defined as over 15 years of military service); the corresponding figure for ROTC cadets was 20.1%; for Active Duty Reserve officers it was 17.3%; for Regular Army members it was 23.3%.

ROTC students also tended to (a) have more siblings and good friends in ROTC and the military, and to (b) have greater past and present contact with military families than non-ROTC students. These findings bring out the importance of primary and secondary socialization in career exploration.

Differences were also found in respondents' ratings of the military attitudes of their parents and friends, with ROTC cadets, especially the *college* cadets, attributing significantly more favorable attitudes to their parents and friends than non-ROTC students. Whether these perceptions are antecedents or consequences of participation in ROTC is impossible to determine from the correlational data available. The final note of interest regarding data presented in Table 4.3 is the finding that *all* respondent groups -- non-ROTC and ROTC; high school, college, and Army -- attributed more favorable military attitudes to their parents, as opposed to their friends. High school and college students, in particular, perceived their friends as having a predominantly negative opinion of the military. This finding is undoubtedly attributable to the disillusionment experienced by many young people in the era of the Vietnam war. Whether the anti-military attitudes prevailing at the time of this study change in the post-war era remains to be documented by future research.

Participants vs. Non-Participants: Family Stability

Table 4.4 presents data on the relationship between the next cluster in the tentative model -- family stability -- and participation in the ROTC/Army career path. Family stability was measured by means of two component items: number of communities lived in while growing up, and separation/divorce between one's parents. College ROTC students appeared to have a less stable

family life than non-ROTC students: They (the cadets) lived in a greater number of communities while growing up ($p < .001$); also, a greater percentage of cadets had separated or divorced parents ($p < .05$).

The former finding is related to the fact that a disproportionate number of ROTC students had fathers in the military. The correlation between number of communities lived in and coming from a military family ranged from .31 to .48 for the various respondent groups.

TABLE 4.4

FAMILY STABILITY,
BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

FAMILY STABILITY VARIABLES	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
% Living in More Than Two Communities While Growing Up	41.6	46.5	$\underline{X}^2(1)$= NS	30.8	45.2	$\underline{X}^2(1)$=36.02***	37.4	34.8	$\underline{X}^2(1)$= NS
% with Separated or Divorced Parents	23.7	22.0	$\underline{X}^2(1)$= NS	9.7	13.7	$\underline{X}^2(1)$= 5.76*	9.5	12.1	$\underline{X}^2(1)$= NS

Note. 1. Due to missing values, the number of respondents on which percentages reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

2. The number in parenthesis following the chi-square statistic ($\underline{X}^2$) is the degrees of freedom on which the significance of $\underline{X}^2$ was evaluated.

*p<.05
***p<.001

Participants vs. Non-Participants: Aptitudes and Achievement

The discussion thus far has centered on the demographic and socialization background variables and their relationship to participation in the ROTC/Army career path. The next analysis concerns the aptitude and achievement variable cluster. There were eight items measuring aptitude and achievement: high school grade average, college grade average, and self-rated ability ratings in physical sciences, social sciences, mathematics, English, fine arts, and physical education. Data on the relationship between these variables and participation in ROTC/Army are given in Table 4.5.

TABLE 4.5

APTITUDES AND ACHIEVEMENT,
BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

APTITUDE AND ACHIEVEMENT VARIABLES	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
Mean, High School Grade Average[a]	2.23	2.36	t= NS	1.86	2.08	t= 6.12***	1.88	1.79	t= NS
Mean, College Grade Average[a]	NA	NA	NA	2.36	2.56	t= 5.49***	2.23	2.08	t=-2.95**
Mean, Self-rated Abilities in:[b]									
Physical Sciences	2.67	2.57	t= NS	2.68	2.56	t=-2.97**	2.43	2.32	t= NS
Social Sciences	2.57	2.55	t= NS	2.42	2.26	t=-4.14***	2.09	2.13	t= NS
Mathematics	2.76	2.68	t= NS*	2.71	2.78	t= NS	2.51	2.46	t= NS
English	2.44	2.68	t=2.53	2.49	2.67	t= 4.23***	2.44	2.50	t= NS*
Fine Arts	2.65	2.64	t= NS	2.67	2.70	t= NS	2.73	2.92	t=2.54
Physical Education	2.14	2.06	t= NS	2.28	2.14	t=-3.16**	2.20	2.16	t= NS

Note. Due to missing values, the number of respondents on which means reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

[a] 1=A; 2=B; 3=C; 4=D; 5=Lower than D

[b] 1=Exceptional; 5=Poor

* $p<.05$
** $p<.01$
*** $p<.001$

It must be borne in mind that the data in Table 4.5 are scored in a counterintuitive manner, with a *high* score reflecting *lower grades* and *lower self-rated ability* scores. ROTC college students reported lower high school ($p < .001$) and lower college ($p < .001$) grades than non-ROTC college students. Active Duty Reserve officers reported lower college grades than Regular Army officers ($p < .01$). The former finding may be of some concern to ROTC recruiters. The latter finding should be reassuring to the Army, but is not surprising in light of the fact that Regular Army commissions are awarded partially on the basis of good grades.

In the self-rated abilities area, both high school and college ROTC students reported lower abilities in English than non-ROTC students ($p < .05$ for high school; $p < .001$ for college). However, college ROTC cadets reported higher abilities than non-ROTC students in the physical sciences, social sciences, and physical education ($p < .01$, .001, and .01, respectively).

Participants vs. Non-Participants: College Major

Table 4.6 presents the distribution of the various respondent groups on the variables college major (intended or actual) and when choice of major was (will be) made. No significant differences on these variables were found between ROTC and non-ROTC students, or between Regular Army and Active Duty Reserve offices.

TABLE 4.6

ACTUAL OR INTENDED COLLEGE MAJOR,

BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

COLLEGE MAJOR VARIABLES	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
College Major[a]			$\chi^2(9)$=NS			NA[b]			$\chi^2(9)$=NS
% Physical Science	14.6	17.7		7.9	12.6		8.3	10.3	
% Social Science	11.7	11.4		16.8	25.5		32.4	31.3	
% Mathematics	7.0	3.8		3.1	2.7		5.0	3.9	
% English	3.3	5.1		3.3	1.6		3.8	3.0	
% Fine Arts	7.5	3.8		5.3	4.5		3.0	3.0	
% Physical Education	4.0	3.8		12.8	3.1		3.0	2.6	
% Engineering	6.4	16.5		6.9	8.9		11.8	14.2	
% Agriculture	3.3	5.1		3.8	2.0		2.8	4.3	
% Other	30.8	26.6		35.5	35.7		28.1	26.2	
% Don't Know	11.3	6.3		4.7	3.6		1.8	1.3	
When Choice of Major Made[a]			$\chi^2(7)$=NS			$\chi^2(7)$=NS			$\chi^2(7)$=NS
% Grade School	6.9	7.9		5.1	4.5		2.8	2.1	
Early High School	24.5	36.8		11.3	13.4		12.0	12.9	
Late High School	41.4	25.0		26.7	26.6		22.8	30.5	
% Summer Before College	7.9	10.5		10.3	7.6		7.3	4.7	
% Freshman Year	7.3	6.6		19.3	22.5		17.3	18.5	
% Sophomore Year	7.0	6.6		21.4	20.9		29.3	25.3	
% Junior Year	2.7	2.6		5.3	4.1		7.0	5.2	
% Senior Year	2.4	3.9		0.7	0.3		1.5	0.9	

Note.

1. Due to missing values, the number of respondents on which percentages reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

2. The number in parenthesis following the chi-square statistic (χ^2) is the degrees of freedom on which the significance of χ^2 was evaluated.

[a]For high school respondents, these items were only asked of those intending to go to college.

[b]Chi-square was not computed to test the significance of the college ROTC vs. non-ROTC difference on the College Major variable because sampling of the non-ROTC Juniors and Seniors was done by Major. Thus the distribution of non-ROTC respondents on this variable is not representative of the non-ROTC population.

Participants vs. Non-Participants: Participation in School Extracurricular Activities

Table 4.7 presents the extent to which the various respondent groups participate(d) in school extracurricular activities. Inconsistent findings on the variable participation in high school extracurricular activities were obtained for the high school and college groups, with the high school JROTC students reporting *heavier* participation than their non-JROTC peers, but the college ROTC students reporting *lower* participation than their non-ROTC peers. These discrepant findings are attributable at least in part to the fact that JROTC membership is itself a high school extracurricular activity, inflating the participation figures for high school JROTC members.

TABLE 4.7

PARTICIPATION IN SCHOOL EXTRACURRICULAR ACTIVITIES, BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

EXTRACURRICULAR ACTIVITY VARIABLES	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
% Participating in more Than One Extracurricular Activity in High School	53.9	71.4	$\chi^2(1)=11.46^{***}$	86.1	81.7	$\chi^2(1)=5.87^{*}$	81.5	85.8	$\chi^2(1)=$ NS
%Who Attended High Schools with JROTC	0.58	100.0	NA	17.6	21.5	$\chi^2(1)=4.04^{*}$	14.5	14.7	$\chi^2(1)=$ NS
% Who Were Members of JROTC in High School	0.0	100.0	NA	2.2	11.7	$\chi^2(1)=59.84^{***}$	8.5	6.0	$\chi^2(1)=$ NS
% Who Are (Were) Members of (in College):									
a Social Fraternity or Sorority	NA	NA	NA	29.6	40.9	$\chi^2(1)=22.40^{***}$	38.3	42.2	$\chi^2(1)=$ NS
College ROTC	NA	NA	NA	5.6	100.0	$\chi^2(1)=$ NA	96.3	97.4	$\chi^2(1)=$ NS
A Campus Religious Group	NA	NA	NA	17.2	16.9	$\chi^2(1)=$ NS	15.5	17.2	$\chi^2(1)=$ NS
A Service-Oriented Club	NA	NA	NA	28.5	36.6	$\chi^2(1)=11.89^{***}$	37.3	49.1	$\chi^2(1)=10.19^{**}$
A Campus Political Party	NA	NA	NA	5.7	7.7	$\chi^2(1)=$ NS	13.3	10.8	$\chi^2(1)=$ NS
A Professional Society	NA	NA	NA	25.3	22.8	$\chi^2(1)=$ NS	44.8	47.0	$\chi^2(1)=$ NS
Student Government	NA	NA	NA	11.7	13.7	$\chi^2(1)=$ NS	21.5	17.7	$\chi^2(1)=$ NS
Athletic Team	NA	NA	NA	26.8	30.2	$\chi^2(1)=$ NS	36.5	40.1	$\chi^2(1)=$ NS

Note. 1. Due to missing values, the number of respondents on which percentages reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

2. The number in parenthesis following the chi-square statistic (χ^2) is the degrees of freedom on which the significance of χ^2 was evaluated.

* $p < .05$
** $p < .01$
*** $p < .001$

It was also found that (a) among college students, five times as many ROTC students were in JROTC, compared with non-JROTC students (11.7% versus 2.2%); (b) a greater proportion of college ROTC cadets attended high schools with a JROTC program than did their non-ROTC counterparts (21.5% versus 17.6%); and (c) a greater number of college ROTC cadets were simultaneously members of a social fraternity ($p < .001$) and/or a service-oriented club ($p < .001$) than non-ROTC students.

Findings (a) and (b) above are probably the ones of greatest interest among results gleaned from this cluster of variables. They indicate that recruitment rates for college ROTC are enhanced by (or at least correlated with) the presence of a JROTC program in one's high school, and by membership in JROTC.

Participants vs. Non-Participants: Personal Values

The next variable cluster studied was the value profile of respondents. Respondents were presented with a list of 14 personal values: Support, Conformity, Recognition, Independence, Benevolence, Leadership, Patriotism, Aestheticism, Religiousness, Need for Uniqueness, Equalitarianism, Acceptance of Authority, Intellectualism, and Pragmaticism (See Section V of the questionnaires in Appendices A, B, and C for how these values were defined). They were asked to choose from among these 14 the three values *most* important to them and the three values *least* important to them. Marked differences were found in the value profile of the college ROTC and non-ROTC groups. In addition, some differences were found between the value profile of Regular Army and Active Duty Reserve officers, with the direction of the difference in general corresponding to the ROTC-non-ROTC difference. Table 4.8 and Figure 4.1 present the relevant data. In Table 4.8 the percentage of people in each respondent group choosing each value as being either one of the three most important or one of the three least important values is given. Independence was, for all groups except the high school JROTC group, the most *popular* "important" value. Conformity, aestheticism, and need for uniqueness were, in general, the "least important" values.

TABLE 4.8

PERSONAL VALUES,

BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

PERSONAL VALUE VARIABLES	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
Support			$\chi^2(1)$= NS			$\chi^2(1)$= 21.60***			$\chi^2(1)$= NS
% for which important[a]	49.9	45.4		38.4	31.6		29.0	28.2	
% unimportant[b]	6.0	9.9		5.2	11.1		7.4	7.0	
Conformity			$\chi^2(1)$= 4.00*			$\chi^2(1)$= 8.00**			$\chi^2(1)$= NS
% important	11.9	18.5		5.8	8.5		2.6	1.3	
% unimportant	39.2	31.0		55.3	44.8		54.3	57.2	
Recognition			$\chi^2(1)$= NS			$\chi^2(1)$= 4.15*			$\chi^2(1)$= 4.25*
% important	25.0	28.4		17.9	24.9		21.7	32.4	
% unimportant	25.4	28.4		28.7	29.5		22.7	20.8	
Independence			$\chi^2(1)$= 8.45**			$\chi^2(1)$= 12.76***			$\chi^2(1)$= 5.80*
% important	56.7	43.4		56.7	45.5		42.5	41.5	
% unimportant	7.7	16.1		5.8	9.6		5.2	10.9	
Benevolence			$\chi^2(1)$=18.42***			$\chi^2(1)$= 41.52***			$\chi^2(1)$= NS
% important	37.1	23.4		42.0	27.6		23.5	19.0	
% unimportant	7.0	21.1		3.8	10.4		9.2	12.6	
Leadership			$\chi^2(1)$=14.29***			$\chi^2(1)$=126.67***			$\chi^2(1)$=11.25***
% important	9.2	18.7		9.0	26.8		22.4	35.1	
% unimportant	53.7	31.1		43.5	21.2		20.4	13.5	
Patriotism			$\chi^2(1)$= 8.91**			$\chi^2(1)$= 57.87***			$\chi^2(1)$= 4.77*
% important	9.3	20.9		5.4	17.2		15.7	19.9	
% unimportant	22.9	17.5		18.7	11.0		12.2	7.4	
Aestheticism			$\chi^2(1)$= NS			$\chi^2(1)$= 36.94***			$\chi^2(1)$= NS
% important	8.7	4.9		10.6	4.6		6.2	5.3	
% unimportant	26.6	29.9		30.2	47.9		45.9	49.5	
Religiousness			$\chi^2(1)$= NS			$\chi^2(1)$= 26.55***			$\chi^2(1)$=4.68*
% important	20.7	28.3		31.1	19.8		19.3	12.2	
% unimportant	19.9	17.4		15.6	22.5		29.5	32.9	
Need for Uniqueness			$\chi^2(1)$= 4.45*			$\chi^2(1)$= NS			$\chi^2(1)$= NS
% important	15.0	7.4		10.0	11.7		8.0	6.5	
% unimportant	31.5	39.8		34.7	33.8		43.6	43.0	
Equalitariamism			$\chi^2(1)$= NS			$\chi^2(1)$= NS			$\chi^2(1)$= NS
% important	23.1	18.5		25.4	26.5		28.9	23.4	
% unimportant	12.5	11.2		8.9	12.6		7.9	6.9	
Acceptance of Authority			$\chi^2(1)$=14.22***			$\chi^2(1)$= 21.66***			$\chi^2(1)$= NS
% important	4.5	12.4		5.3	10.1		10.7	11.3	
% unimportant	19.2	8.7		21.4	14.2		21.4	13.1	
Intellectualism			$\chi^2(1)$= NS			$\chi^2(1)$= NS			$\chi^2(1)$=6.49*
% important	18.2	21.0		25.9	24.7		34.2	24.2	
% unimportant	9.1	10.0		10.8	11.9		8.4	12.6	
Pragmaticism			$\chi^2(1)$= NS			$\chi^2(1)$= NS			$\chi^2(1)$= NS
% important	10.7	8.6		16.7	20.4		35.6	39.8	
% unimportant	18.7	28.6		17.2	18.7		12.0	13.0	

Note: 1. Due to missing values, the number of respondents on which percentages reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

2. The number in parenthesis following the chi-square statistic (χ^2) is the degrees of freedom on which the significance of χ^2 was evaluated.

3. All percentages given are based on three items:

% for which important = % choosing value as most important + % choosing value as second most important + % choosing value as third most important

% unimportant = % choosing value as least important + % choosing value as second least important + % choosing value as third least important

Thus for each value, the sum of % important + % unimportant, subtracted from 100%, gives the % of respondents for whom the value was neither among the three most important nor three least important values.

* $p < .05$
** $p < .01$
*** $p < .001$

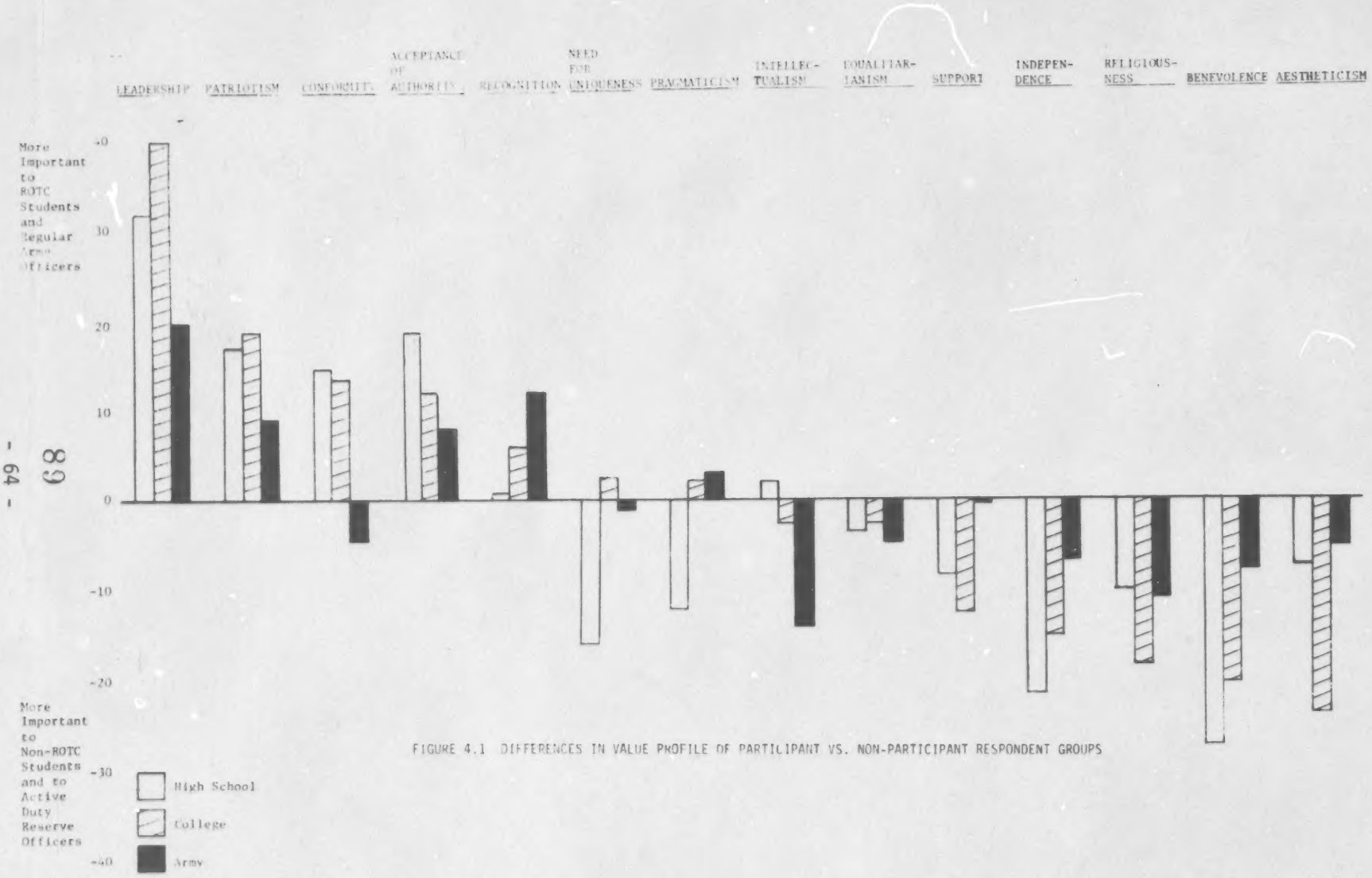

FIGURE 4.1 DIFFERENCES IN VALUE PROFILE OF PARTICIPANT VS. NON-PARTICIPANT RESPONDENT GROUPS

Differences between groups' value choices were evaluated for significance using the chi-square statistic. As Table 4.8 shows, significant differences between the high school groups were found for 7 of the 14 values, between the college groups for 10 of the 14 values, and between the Army groups for 6 of the 14 values. These differences are portrayed graphically in Figure 4.1, using the following formula:

Difference between Group 1 (non-ROTC; Reserve) and Group 2 (ROTC; Regular Army)
= (% important, Group 2 + % unimportant, Group 1) minus
(% unimportant, Group 2 + % important, Group 1)

Thus, positive difference scores reflect values more important to ROTC and Regular Army members than to non-ROTC and Active Duty Reserve members. Negative difference scores reflect values more important to non-ROTC and Active Duty Reserve members than to ROTC and Regular Army members.

As Figure 4.1 shows, for both the college and high school groups, leadership, patriotism, conformity, acceptance of authority, and recognition were the values held *more* deeply by ROTC as opposed to non-ROTC students. Aestheticism, benevolence, religiousness, independence, support, and equalitarianism were the values held *less* deeply by ROTC as opposed to non-ROTC students. Differences between Regular Army members and members of the Active Duty Reserve followed this difference pattern exactly, except for the conformity value, which was more important to the Reservists than to the Regular Army members.

The quantity and consistency of value differences between the high school, college and Army officer respondent groups makes this cluster one of the most potent ones in determining who joins or does not join ROTC.

Participants vs. Non-Participants: Careers Being Considered

Respondents were presented with a list of 15 career groups "whose members share similar interests, abilities, training, and aptitudes" (the first 12 career groups were originally constructed by Project TALENT, a large-scale

longitudinal study of young people's careers being carried out by the American Institutes for Research):

1. Engineering, Physical Science, Mathematics, Architecture
2. Medical and Biological Sciences
3. Business Administration
4. General Teaching and Social Service
5. Humanities, Law, Social and Behavioral Sciences
6. Fine Arts, Performing Arts
7. Technical Jobs
8. Proprietors, Sales
9. Mechanics, Industrial Trades
10. Construction Trades
11. Secretarial-Clerical, Office Workers
12. General Labor, Community and Public Service
13. Military Officer
14. Housewife
15. Other

Respondents were asked: "Which of the above 15 career clusters are you most likely to end up in?;" "Which . . . are you next most likely to end up in?;" "Which . . . are you third most likely to end up in?" Table 4.9 presents the distribution of answers to the first question, by respondent group and by sex. Table 4.10 presents the distribution of answers to the three questions combined, also by respondent group and by sex. The percentages reported in Table 4.10 are the *sum of percentages* of respondents choosing the career group as first most likely, second most likely, and third most likely. Because Table 4.9 is based on responses to a single question and Table 4.10 is based on responses to three questions, their column sums are different (100% and 300% respectively).

Several inter-respondent group differences were found, the most important of which were the following:

1. Few non-ROTC college students are considering a military career: 1.6% of non-ROTC college students said that a military career was their first choice; 6.0% said it was one of their top three choices (corresponding figures for ROTC cadets were 30.0% and 70.2%, respectively).

2. As may be expected, a greater proportion of Regular Army as opposed to Active Duty Reserve officers are considering making the military a career.

3. Proportionately fewer ROTC cadets (as opposed to their non-ROTC peers) intend to go into the Teaching and Social Service career cluster. This finding holds up even when sex is controlled for, and buttresses the finding reported in the previous section that ROTC students place a proportionately lower

TABLE 4.9

FIRST CAREER BEING CONSIDERED,

BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

FIRST CAREER BEING CONSIDERED	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
% Considering Engineering, Physical Science, Mathematics, Architecture	12.0	19.6	$\chi^2(1)$= 4.81*	9.8	10.4	$\chi^2(1)$=NS	13.5	14.6	$\chi^2(1)$=NS
Males	17.8	24.4		15.3	11.0				
Females	7.4	4.2		3.6	5.1				
% Medical and Biological Sciences	16.7	14.7	$\chi^2(1)$=NS	14.4	12.0	$\chi^2(1)$=NS	6.5	3.4	$\chi^2(1)$=NS
Males	13.4	14.1		11.0	11.4				
Females	19.6	16.7		18.2	15.2				
% Business Administration	7.0	10.8	$\chi^2(1)$=NS	16.0	12.9	$\chi^2(1)$=NS	24.0	15.0	$\chi^2(1)$= 7.27**
Males	9.1	11.5		20.3	13.4				
Females	5.4	8.3		11.2	8.9				
% Teaching, Social Service	7.0	2.0	$\chi^2(1)$=NS	20.9	5.3	$\chi^2(1)$= 83.55***	8.8	6.0	$\chi^2(1)$=NS
Males	3.4	2.6		12.3	4.5				
Females	10.1	0.0		30.7	12.7				
% Humanities, Law, Social Science	11.4	8.8	$\chi^2(1)$=NS	14.9	17.9	$\chi^2(1)$=NS	18.3	13.3	$\chi^2(1)$=NS
Males	12.3	6.4		16.6	18.1				
Females	10.4	16.7		12.9	16.5				
% Fine Arts, Performing Arts	8.5	5.9	$\chi^2(1)$=NS	4.7	2.3	$\chi^2(1)$= 6.75**	.5	1.3	$\chi^2(1)$=NS
Males	7.3	6.4		3.9	2.1				
Females	9.5	4.2		5.6	3.8				
% Technical Jobs	4.1	2.9	$\chi^2(1)$=NS	1.5	1.5	$\chi^2(1)$=NS	1.0	1.3	$\chi^2(1)$=NS
Males	7.3	3.8		2.4	1.5				
Females	1.5	0.0		.5	1.3				
% Proprietors, Sales	1.3	2.0	$\chi^2(1)$=NS	1.0	.5	$\chi^2(1)$=NS	2.8	1.3	$\chi^2(1)$=NS
Males	.9	0.0		1.3	.3				
Females	1.7	8.3		.7	2.5				
% Mechanics, Industrial	4.1	2.0	$\chi^2(1)$=NS	.7	.8	$\chi^2(1)$=NS	.5	0.0	$\chi^2(1)$=NS
Males	8.7	2.6		1.1	.9				
Females	.4	0.0		.2	0.0				
% Construction Trades	1.8	1.0	$\chi^2(1)$=NS	.6	.5	$\chi^2(1)$=NS	.3	.4	$\chi^2(1)$=NS
Males	3.6	1.3		1.1	.6				
Females	.2	0.0		0.0	0.0				
% Secretary/Clerical	8.4	2.9	$\chi^2(1)$= 3.85*	2.3	.4	$\chi^2(1)$= 10.45**	0.0	0.0	$\chi^2(1)$=NS
Males	.2	1.3		.4	0.0				
Females	15.1	8.3		4.4	3.8				
% Community and Public Service	1.7	1.0	$\chi^2(1)$=NS	1.1	1.1	$\chi^2(1)$=NS	.5	1.3	$\chi^2(1)$=NS
Males	2.3	1.3		2.2	1.0				
Females	1.3	0.0		0.0	1.3				
% Military Officer	2.7	13.7	$\chi^2(1)$= 31.13***	1.6	30.0	$\chi^2(1)$=260.87***	21.0	39.1	$\chi^2(1)$= 24.11***
Males	4.6	14.1		2.6	31.6				
Females	1.3	12.5		.5	16.5				
% Housewife	4.3	4.9	$\chi^2(1)$=NS	1.7	.5	$\chi^2(1)$= 5.16*	0.0	0.0	$\chi^2(1)$=NS
Males	.2	1.3		0.0	.1				
Females	7.6	16.7		3.6	3.8				
% Other	8.9	7.8	$\chi^2(1)$=NS	8.7	4.0	$\chi^2(1)$= 60.38***	2.5	3.0	$\chi^2(1)$=NS
Males	8.9	9.0		9.5	3.4				
Females	8.6	4.2		7.8	8.9				
% All Careers	100.0	100.0		100.0	100.0		100.0	100.0	
Males	100.0	100.0		100.0	100.0		100.0	100.0	
Females	100.0	100.0		100.0	100.0		100.0	100.0	

Note:

1. Due to missing values, the number of respondents on which percentages reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

2. The number in parenthesis following the chi-square statistic (χ^2) is the degrees of freedom on which the significance of χ^2 was evaluated.

3. No sex breakdown is given for the Army Officer groups because there were no females in these groups.

*$p < .05$; **$p < .01$; ***$p < .001$

TABLE 4.10

FIRST THREE CAREERS BEING CONSIDERED,

BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

ALTERNATIVE CAREERS BEING CONSIDERED	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
% Considering Engineering, Physical Science, Mathematics, Architecture	23.5	44.3	$\chi^2(1)= 21.08^{***}$	20.2	25.9	$\chi^2(1)= 7.48^{**}$	23.1	26.7	$\chi^2(1)$=NS
Males	34.2	55.4		31.2	28.0				
Females	15.1	8.4		7.7	7.7				
% Medical and Biological Sciences	26.1	27.5	$\chi^2(1)$=NS	22.0	21.1	$\chi^2(1)$=NS	15.8	15.0	$\chi^2(1)$=NS
Males	22.2	24.5		18.8	20.6				
Females	29.6	37.6		25.5	24.1				
% Business Administration	26.0	42.4	$\chi^2(1)= 12.46^{***}$	35.7	35.2	$\chi^2(1)$=NS	56.0	50.2	$\chi^2(1)$=NS
Males	29.7	47.8		46.8	36.9				
Females	23.3	24.9		23.4	21.6				
% Teaching, Social Service	26.0	11.9	$\chi^2(1)= 9.89^{***}$	53.6	30.2	$\chi^2(1)= 90.78^{***}$	35.8	34.3	$\chi^2(1)$=NS
Males	15.2	9.1		45.5	28.8				
Females	35.1	20.8		62.9	43.1				
% Humanities, Law, Social Science	30.5	19.7	$\chi^2(1)= 5.19^{*}$	34.6	38.6	$\chi^2(1)$=NS	40.6	37.3	$\chi^2(1)$=NS
Males	28.8	19.4		36.2	39.6				
Females	31.0	20.9		32.7	29.2				
% Fine Arts, Performing Arts	20.6	14.9	$\chi^2(1)$=NS	15.3	8.0	$\chi^2(1)= 20.59^{***}$	5.3	3.0	$\chi^2(1)$=NS
Males	19.8	16.9		12.2	7.3				
Females	21.0	8.4		18.8	13.9				
% Technical Jobs	17.9	14.8	$\chi^2(1)$=NS	12.5	14.2	$\chi^2(1)$=NS	14.0	14.2	$\chi^2(1)$=NS
Males	30.9	18.1		17.1	15.2				
Females	7.3	4.2		7.3	6.3				
% Proprietors, Sales	8.1	5.0	$\chi^2(1)$=NS	11.4	9.3	$\chi^2(1)$=NS	16.3	12.9	$\chi^2(1)$=NS
Males	8.0	2.6		16.4	9.5				
Females	8.3	12.5		5.8	7.6				
% Mechanics, Industrial	13.1	7.9	$\chi^2(1)$=NS	5.0	6.2	$\chi^2(1)$=NS	4.3	4.3	$\chi^2(1)$=NS
Males	27.2	10.3		8.8	6.6				
Females	1.7	0.0		0.6	2.5				
% Construction Trades	10.9	8.0	$\chi^2(1)$=NS	7.8	7.3	$\chi^2(1)$=NS	4.1	7.7	$\chi^2(1)$=NS
Males	21.9	10.5		13.8	8.3				
Females	1.9	0.0		0.2	2.6				
% Secretary/Clerical	23.4	10.8	$\chi^2(1)= 8.49^{**}$	16.3	4.8	$\chi^2(1)= 54.87^{***}$	1.8	2.2	$\chi^2(1)$=NS
Males	3.9	5.2		3.5	2.4				
Females	39.5	39.2		30.6	25.3				
% Community and Public Service	12.0	10.9	$\chi^2(1)$=NS	13.8	8.9	$\chi^2(1)= 9.55^{**}$	6.5	7.3	$\chi^2(1)$=NS
Males	11.6	6.4		15.8	8.6				
Females	12.6	25.0		11.7	10.2				
% Military Officer	11.1	45.4	$\chi^2(1)= 88.64^{***}$	6.0	70.2	$\chi^2(1)=729.25^{***}$	62.6	75.2	$\chi^2(1)= 10.69^{**}$
Males	17.4	50.6		8.3	72.9				
Females	6.0	29.2		3.5	46.9				
% Housewife	14.7	13.8	$\chi^2(1)$=NS	23.6	5.0	$\chi^2(1)=110.05^{***}$	0.5	0.0	$\chi^2(1)$=NS
Males	1.3	2.6		0.9	0.5				
Females	43.6	50.0		48.8	43.0				
% Other	26.1	22.7	$\chi^2(1)$=NS	22.5	14.9	$\chi^2(1)= 15.24^{***}$	13.5	9.9	$\chi^2(1)$=NS
Males	27.9	20.7		24.8	14.7				
Females	24.2	2.9		20.0	16.5				
% All Careers	300.0	300.0		300.0	300.0		300.0	300.0	
Males	300.0	300.0		300.0	300.0		300.0	300.0	
Females	300.0	300.0		300.0	300.0		300.0	300.0	

Note:

1. Due to missing values, the number of respondents on which percentages reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

2. The number in parenthesis following the chi-square statistic (χ^2) is the degrees of freedom on which significance of χ^2 was evaluated.

3. Percentages given in this table refer to percentage of respondents in each group choosing the career as either most likely, second most likely, or third most likely. Since percentages reflect the sum of percentages across three items, total % in each column adds up to 300%

$^{*}p < .05$; $^{**}p < .01$; $^{***}p < .001$

value on benevolence than non-ROTC students.

Inter-sex differences were also found in respondents' career plans. For all four student respondent groups (high school non-JROTC, high school JROTC, college non-ROTC, and college ROTC), proportionately more males than females reported that they would likely end up in the following career groups: Engineering, Physical Science, Mathematics, Architecture; Business Administration; Technical Jobs; Mechanics, Industrial Trades; Construction Trades; Military Officer. Proportionately more females than males reported that they would likely end up in the following career groups: Medical and Biological Sciences, Teaching and Social Service; Fine Arts, Performing Arts; Secretary/Clerical; and Housewife. These findings show that differential sex roles and career plans continue to exist among present-day students.

An interesting finding emerges from comparison of figures reported in Tables 4.9 and 4.10. Among college women, about 3.6% say that their first career most likely is that of housewife; 4.4% say that their first career most likely is that of a secretary or clerk. When the second and third career possibilities are brought into the picture, however, these figures shoot up to 48.8% (for the housewife career) and 30.6% (for the secretarial/clerical career). It appears that being a housewife and being a secretary are "fall-back" careers for these college-educated women, i.e., careers which do not represent their first choice, but in which they realize they might end up, nevertheless.

Participants vs. Non-Participants: Interests and Aspirations

Respondents were asked to rate their interests in six academic areas -- Physical Sciences, Social Sciences, Mathematics, English, Fine Arts, and Physical Education -- on a 5-point scale with a 1 reflecting "very high" interest and a 5 "very low" interest (thus the *lower* the rating, the *higher the reported interest* in the area). Distribution of responses to these items is given in the first six rows of Table 4.11. No differences in academic interests were found between the high school and Army officer participant groups. Differences in four of the six subject areas, however, were found between the college groups, with ROTC students reporting a higher interest than non-ROTC students in the Physical and Social Sciences ($p < .001$) and

TABLE 4.11

INTERESTS AND ASPIRATIONS,
BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

INTEREST AND ASPIRATION VARIABLES	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
Mean, Self-Rated Interests[a] in:									
Physical Sciences	2.79	2.57	t= NS	2.84	2.48	t=-6.57***	2.28	2.24	t= NS
Social Sciences	2.65	2.61	t= NS	2.44	2.24	t=-4.13***	1.97	1.97	t= NS
Mathematics	2.88	2.70	t= NS	2.95	2.89	t= NS	2.63	2.67	t= NS
English	2.57	2.69	t= NS	2.69	2.97	t= 5.30***	2.68	2.64	t= NS
Fine Arts	2.55	2.66	t= NS	2.56	2.70	t= 2.71**	2.61	2.71	t= NS
Physical Education	2.13	2.15	t= NS	2.17	2.09	t= NS	2.13	2.09	t= NS
Mean, Highest Educational Level Aspired for[b]	3.75	4.09	t= NS	3.79	4.11	t= 7.35***	5.44	5.36	t= NS
Males only	3.79	4.24	t=2.06*	3.98	4.13	t= 2.88**			
Females only	3.73	3.58	t= NS	3.57	3.93	t= 3.25***			
Mean, Salary Expectations for 15 Years out of High School[c]	4.47	4.45	t= NS	4.27	4.73	t= 6.51***	4.85	4.47	t=4.24***
Males only	5.02	4.69	t= NS	4.82	4.73	t= NS			
Females only	4.01	3.67	t= NS	3.64	4.72	t= 6.69***			
Mean, Career vs. Family Salience[d]	3.43	3.25	t= NS	3.78	3.66	t= 2.16*	3.89	3.88	t= NS
Males only	3.37	3.23	t= NS	3.84	3.69	t= 2.26*			
Females only	3.48	3.29	t= NS	3.71	3.47	t= 1.94*			
Mean, Industrial vs. Occupational Commitment[e]	2.29	2.55	t=2.28*	2.13	2.26	t= 2.52*	2.16	2.17	t= NS
Males only	2.24	2.58	t=2.47*	2.09	2.24	t= 2.40*			
Females only	2.33	2.46	t= NS	2.18	2.49	t= 2.47*			

Note. Due to missing values, the number of respondents on which means reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

[a] 1 = Very high; 5 = Very low

[b] High School and Army officer codes:
1 = High School graduate
2 = Some college
3 = Associate of Arts or certificate
4 = Bachelor
5 = Master
6 = Ph.D.

College codes:
1 = Some college
2 = Associate of Arts or certificate
3 = Bachelor
4 = Master
5 = Ph. D.

[c] 4 = $15,000 - $19,999 per year; 5 = $20,000 - $24,999 per year

[d] 1 = Job more salient; 5 = Family more salient

[e] 1 = Nature of work more salient; 5 = Organization more salient

* $p<.05$
** $p<.01$
*** $p<.001$

non-ROTC students reporting a higher interest in English ($p < .001$) and Fine Arts ($p < .01$).

Table 4.11 also gives data from four other interest/aspiration items: a) highest educational level aspired for; b) salary expectations for 15 years out of high school; c) importance to the person of job vs. family; and d) importance to the person of the nature of work one is doing vs. the quality and reputation of the organization for which one works. The footnotes to the table give the direction in which each of these variables was scored. Because of documented sex differences in these areas, data in Table 4.11 are presented both for the respondent groups as a whole, and broken down by sex.

Two significant findings were obtained for the high school sample. Male JROTC members had higher educational aspirations than male non-JROTC members ($p < .05$). This is probably attributable both to their (JROTC members') higher socio-economic status as well as to the fact that a greater number of JROTC members aspire to be Army officers via the ROTC route, which requires a college degree. Male JROTC members also exhibited greater organizational salience than did their non-JROTC peers ($p < .05$), a finding which complements another of the study's results (to be discussed in a subsequent section), that participants in the ROTC/Army career path have higher bureaucratic tendencies than non-participants.

For the Army officer sample, only one significant difference was found between Regular Army and Active Duty Reserve members, with the Reservists reporting higher eventual salary expectations than Regular Army members ($p < .001$).

As is the case with almost all the tentative model's variable clusters, greatest differences between participants and non-participants were found for the college sample. ROTC members -- a) had higher educational aspirations ($p < .001$); b) expected a higher salary 15 years after high school ($p < .001$); c) had higher job, as opposed to family, salience ($p < .05$); and d) had higher organizational, as opposed to occupational, salience ($p < .05$) -- than non-ROTC members. The higher salary expectations on the part of ROTC members was attributable completely to the ROTC female subsample; male ROTC members did *not* have higher salary expectations than their non-ROTC peers, in keeping with the previously mentioned finding that members of the Regular Army had lower salary expectations than their Reservist peers.

As far as sex differences were concerned, females in all groups had lower educational aspirations and lower salary expectations than males. High school females reported higher family salience than high school males (as might be expected given traditional sex roles), but, surprisingly, college females reported lower family salience than college males.

Participants vs. Non-Participants: What They Are Looking For in a Job

Respondents were presented with 21 job factors which had been uncovered by previous researchers as being some of the possible components of job satisfaction. They were asked to rate each dimension for personal importance on a 5-point scale, with a 1 standing for an "extremely important" rating and a 5 standing for a rating of "not important at all." College and Army officer respondents were, in addition, asked to rate the factors on a separate 5-point scale for potential or actual satisfaction in an Army officer job. Table 4.12 summarizes the data gathered from the first set of items (the importance ratings). In Table 4.12, the *lower* the figure, the *higher the importance* assigned by respondents.

Only three differences were found between the high school JROTC and non-JROTC ratings, with the JROTC group placing higher importance on chance to be a leader ($p < .001$) and the non-JROTC students placing higher importance on salary and job security ($p < .05$).

The differences obtained between members of the Regular Army and Active Duty Reservists were interesting because of the uniformity of their direction. There were eight job dimensions on which significantly different importance ratings were assigned by the two Army officer groups: utilization of skills ($p < .01$), contribution to society ($p < .01$), more schooling ($p < .05$), stability of home life ($p < .05$), personal freedom ($p < .05$), chance to help others ($p < .05$), interesting/challenging job ($p < .05$), and advancement opportunity ($p < .05$). Members of the Regular Army assigned *lower importance ratings* to *all* these dimensions than did members of the Active Duty Reserve. Interestingly, five of these eight dimensions -- utilization of skills, contribution to society, stability of home life, personal freedom, and chance to help others -- were ones on which an Army career was downrated in general by all respondent groups, as the next section will show.

TABLE 4.12

MEAN IMPORTANCE RATINGS ASSIGNED TO 21 JOB DIMENSIONS, BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

JOB DIMENSIONS	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
Salary	1.58	1.77	t= 2.34*	1.92	1.79	t=-3.38***	1.87	1.91	t=NS
Prestige	2.22	2.22	t=NS	2.24	2.00	t=-5.33***	2.02	2.04	t=NS
Responsibility	1.70	1.78	t=NS	1.65	1.63	t=NS	1.43	1.42	t=NS
Interesting People	1.71	1.73	t=NS	1.56	1.65	t= 2.38*	1.65	1.77	t=NS
Utilization of Skills	1.79	1.84	t=NS	1.70	1.68	t=NS	1.75	1.97	t= 3.12**
Contribution to Society	2.18	2.02	t=NS	1.90	1.90	t=NS	1.85	2.06	t= 2.63**
Geographic Desirability	2.36	2.34	t=NS	2.07	2.13	t=NS	2.06	2.22	t=NS
More Schooling	2.31	2.09	t=NS	2.18	1.84	t=-6.93***	1.66	1.80	t= 2.18*
Stability of Home Life	1.85	1.78	t=NS	1.61	1.76	t= 3.47***	1.88	2.06	t= 2.13*
Chance to be Leader	2.51	1.91	t=-4.81***	2.17	1.68	t=-10.95***	1.61	1.60	t=NS
Personal Freedom	1.74	1.80	t=NS	1.49	1.55	t=NS	1.53	1.65	t= 2.07*
Adventure	1.95	1.92	t=NS	1.90	1.70	t=-4.79***	1.88	1.76	t=NS
Job Security	1.56	1.76	t=-2.29*	1.54	1.38	t=-4.59***	1.65	1.65	t=NS
Chance to Help Others	1.68	1.65	t=NS	1.57	1.62	t=NS	1.71	1.84	t= 1.98*
Self-Improvement	1.52	1.67	t=NS	1.41	1.34	t=-2.22***	1.32	1.38	t=NS
Quality of Supervisors	2.02	1.90	t=NS	1.68	1.61	t=NS	1.46	1.52	t=NS
Interesting/Challenging Job	1.62	1.71	t=NS	1.40	1.37	t=NS	1.27	1.36	t= 2.19*
Feedback on Performance	2.13	1.96	t=NS	1.72	1.67	t=NS	1.52	1.56	t=NS
Importance of Work	1.88	1.81	t=NS	1.68	1.54	t=-3.62***	1.56	1.60	t=NS
Family Contentment	1.73	1.72	t=NS	1.45	1.45	t=NS	1.58	1.55	t=NS
Advancement Opportunity	1.72	1.63	t=NS	1.60	1.34	t=-7.01***	1.37	1.48	t= 2.13*

Note

1. 1= Extremely Important; 5= Not Important At All; Thus the lower the mean assigned to the dimension by a respondent group, the more important the dimension to the group.

2. Due to missing values, the number of respondents on which means reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

*p < .05
**p < .01
***p < .001

Differences in importance ratings assigned by the college ROTC and non-ROTC groups reflected patterns different (at first glance) from those described above for the high school and Army officer samples. The non-ROTC group gave greater importance to interesting people ($p < .05$) and stability of home life ($p < .001$). The ROTC group gave greater importance to salary, prestige, more schooling, chance to be a leader, adventure, job security, self-improvement, importance of work, and advancement opportunity. Five of these dimensions -- chance to be a leader, advancement opportunity, self-improvement, adventure, and job security -- were also top-rated by the ROTC group for expected satisfaction in the Army, as the next section will show.

Thus, perhaps a common thread runs through the differing Army officer and college ROTC patterns. Reservists (many of whom will soon be leaving the Army) stress the importance of dimensions the Army does *not* satisfy. ROTC cadets (many of whom will soon be entering the Army) stress the importance of dimensions they expect Army to satisfy.

Participants vs. Non-Participants: Expected and Actual Satisfaction with an Army Officer Job

Table 4.13 gives the mean Army job satisfaction ratings assigned by college students and Army officers. As was the case with the previous table, a *lower* number in Table 4.13 reflects a *higher rating*. Ratings assigned by both the non-ROTC and ROTC college students may be conceptualized as *expectations* regarding an Army officer career. Ratings assigned by Army officers, of course, reflect actual job *experiences*. To help the reader digest the information provided in Table 4.13, the means in this table are plotted in Figure 4.2. In the figure the job dimensions are ordered according to decreasing expected satisfaction ratings assigned by ROTC students. Also, the structure of the chart's ordinate is reversed, so that the very satisfactory (1) ratings are plotted higher than the very unsatisfactory (5) ratings.

The findings reported in Table 4.13 and Figure 4.2 can be easily summarized:

1. An Army officer career is given a relatively high rating by all respondent groups. Only five of the 84 mean ratings reported in Table 4.13 are negative (i.e., higher than 3.0.).

TABLE 4.13

MEAN ARMY JOB SATISFACTION RATINGS ASSIGNED TO 21 JOB DIMENSIONS, BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

JOB DIMENSIONS	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
Salary	NA	NA	NA	2.20	1.91	t= -6.20***	2.33	2.19	t= NS
Prestige	NA	NA	NA	2.31	1.87	t= -9.04***	2.31	2.19	t= NS
Responsibility	NA	NA	NA	2.05	1.57	t=-10.48***	1.94	1.75	t=-2.31*
Interesting People	NA	NA	NA	2.02	1.73	t= -6.00***	2.22	2.23	t= NS
Utilization of Skills	NA	NA	NA	2.17	2.00	t= -3.38***	3.01	3.05	t= NS
Contribution to Society	NA	NA	NA	2.45	2.15	t= -5.17***	3.01	2.91	t= NS
Geographic Desirability	NA	NA	NA	2.58	2.30	t= -4.68***	2.86	2.72	t= NS
More Schooling	NA	NA	NA	2.16	1.75	t= -8.50***	2.46	2.55	t= NS
Stability of Home Life	NA	NA	NA	2.56	2.39	t= -2.55***	3.29	3.39	t= NS
Chance to be Leader	NA	NA	NA	2.00	1.43	t=-12.59***	1.79	1.61	t=-2.60**
Personal Freedom	NA	NA	NA	2.52	2.32	t= -3.07*	2.96	2.88	t= NS
Adventure	NA	NA	NA	1.97	1.54	t= -9.63***	2.02	1.88	t= NS
Job Security	NA	NA	NA	1.64	1.55	t= NS	2.32	2.06	t=-2.63**
Chance to Help Others	NA	NA	NA	2.13	1.82	t= -6.15***	2.18	2.19	t= NS
Self-Improvement	NA	NA	NA	1.99	1.53	t= -9.64***	2.18	2.17	t= NS
Quality of Supervisors	NA	NA	NA	2.15	1.82	t= -6.29***	2.59	2.81	t= 2.16*
Interesting/Challenging Job	NA	NA	NA	2.08	1.62	t= -8.92***	2.39	2.32	t= NS
Feedback on Performance	NA	NA	NA	2.05	1.68	t= -7.81***	2.56	2.35	t=-2.15*
Importance of Work	NA	NA	NA	2.14	1.68	t= -9.07***	2.44	2.35	t= NS
Family Contentment	NA	NA	NA	2.24	1.96	t= -4.78***	2.57	2.74	t= NS
Advancement Opportunity	NA	NA	NA	1.75	1.43	t= -7.52***	2.42	2.19	t=-2.39*

Note. 1. 1 = Very satisfactory; 5 = Very unsatisfactory; thus a low mean reflects high satisfaction with the dimension. High School students were not asked to rate the job dimensions for potential satisfaction in an Army officer career. For College students, these Satisfaction ratings are expectations; for Army officers, they reflect actual Satisfaction ratings with current job.

2. Due to missing values, the number of respondents on which means reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

* $p<.05$
** $p<.01$
*** $p<.001$

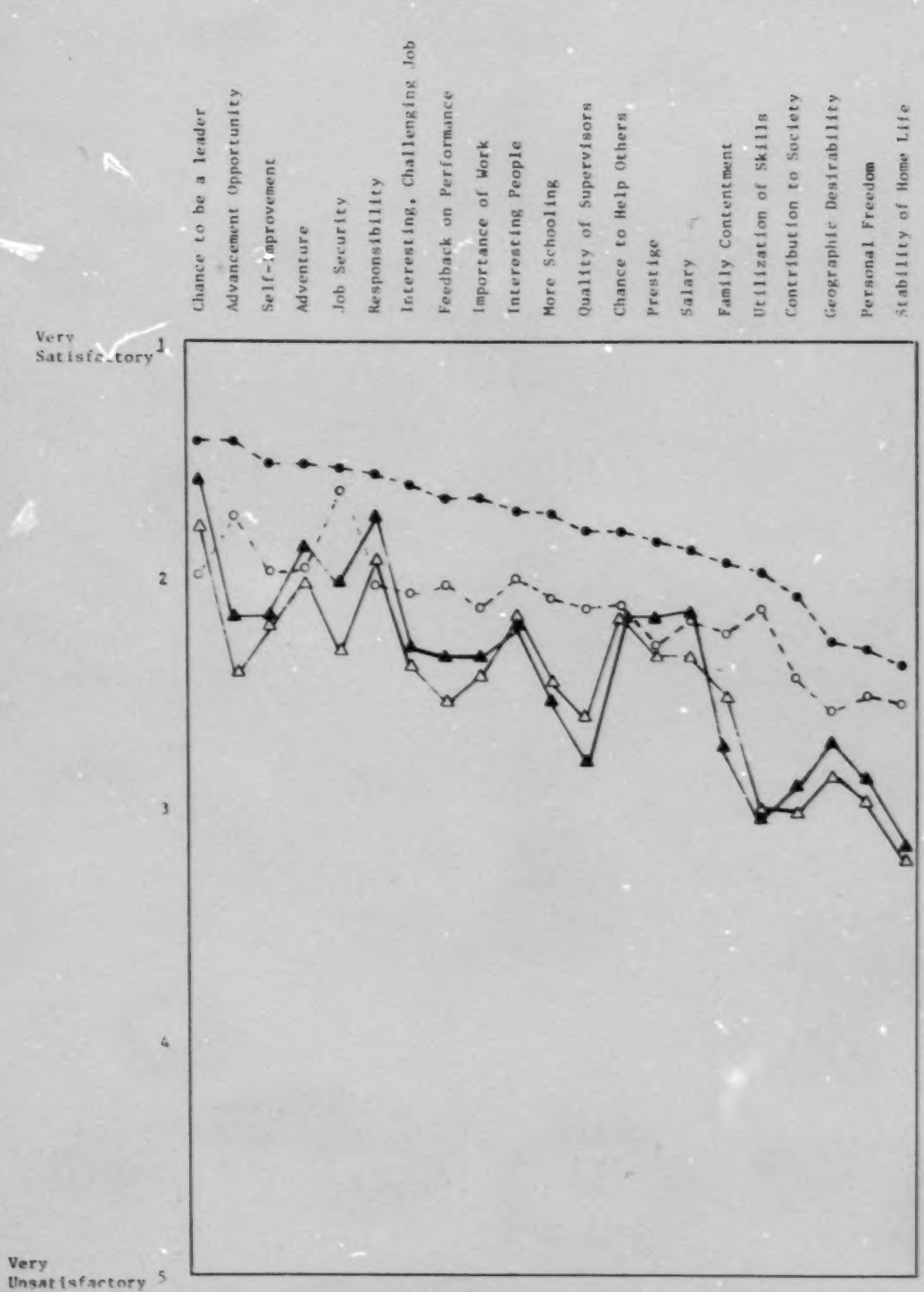

FIGURE 4.2

SATISFACTION RATINGS FOR AN ARMY OFFICER JOB

○ Expected satisfaction, non-ROTC College Students
● Expected satisfaction, ROTC College Students
▲ Actual satisfaction, Army officers (Regular Army)
△ Actual satisfaction, Army officers (Reserve)

- - - Expectations
—— Actual Experiences

2. ROTC cadets forsee an Army career as providing more satisfaction than do non-ROTC students. ROTC students assigned higher satisfaction ratings to an Army career on each of the 21 dimensions studied; only one of these 21 differences (job security) failed to reach statistical significance.

3. Regular Army members are more satisfied with their Army jobs than are members of the Active Duty Reserve. The only dimension on which Reservists were more satisfied than Regular Army members was quality of supervisors ($p < .05$). Regular Army members were more satisfied with the following dimensions: responsibility ($p < .05$), chance to be a leader ($p < .01$), job security ($p < .01$), feedback on performance ($p < .05$), and advancement opportunity ($p < .05$). These findings are not surprising in light of the fact that members of the Regular Army are more in the mainstream of the Army "career" than are members of the Active Duty Reserve.

4. Striking differences between college student and Army officer ratings were found, and are most easily perceived by perusal of Figure 4.2. All 21 of the ROTC expected satisfaction ratings were higher than Army officer actual satisfaction ratings. On only five of the 21 dimensions -- especially, chance to be a leader and responsibility -- did Army officer actual satisfaction ratings exceed those of the non-ROTC students.

These differences in expectations versus experiences are consistent with previous cross-sectional as well as longitudinal studies in civilian as well as military contexts, but the magnitude of the differences obtained in the present study remains surprising. There are two possible explanations for these differences. If one is willing to assume the comparability of the college and Army officer groups, the only explanation would be disconfirmation by the Army experience of high expectations held while in college, a phenomenon which the career commitment model would postulate to lower commitment to the Army career.

However, because of the unique circumstances in which the present young officer group found themselves while in college (with the Vietnam War and the draft going on), it is possible that the present college and Army groups are *not* comparable, that the Army officer group had negative expectations about Army life while in college, and that little or no disconfirmation of expectations actually occurred upon assumption of the Army job.

The present cross-sectional study cannot provide information regarding

which of the two explanations for the data is the right one. Of major concern to the Army should be: to what extent will the high expectations of present ROTC cadets be disconfirmed by their Army experience? Only a longitudinal study will be able to answer this question.

5. Ratings assigned by the two Army officer groups correspond more closely to each other than do ratings of the two college groups. This can be noted by a quick glance at Figure 4.2; also by the fact that only six of the 21 ratings assigned by the Army officer groups differed significantly from each other; none of the six findings were at the .001 level (see Table 4.13). On the other hand, 20 of the 21 ratings assigned by the college ROTC and non-ROTC groups differed from each other; 19 of these differences were significant at the .001 level.

6. The job dimensions best satisfied by an Army officer job were: chance to be a leader, adventure, and responsibility (according to both the college students and the Army officers), advancement opportunity, self-improvement, and job security (according to the college students). There was unanimous consensus among all respondent groups that the following job dimensions were *least* well satisfied by an Army officer job: stability of home life, personal freedom, geographic desirability, contribution to society, utilization of skills, and family contentment. In addition, Army officers gave their supervisors a low rating. The fact that all groups, including ROTC cadets and Army officers, downrated the degree to which an Army officer job contributes to society, is worthy of further investigation. Further research should likewise be undertaken to find out how the Army can better serve its members on the other unsatisfactory dimensions.

Participants vs. Non-Participants: Socio-Psychological Scale Variables

Chapter 2 of this report discussed the definition and construction of the socio-psychological scales created from items in the questionnaire. The scale variables measured were: beliefs about ROTC, beliefs about the Army, subscription to military ideology, bureaucratic tendencies, need for fate control, anomy, and career development (exploration and establishment stages). Table 4.14 presents data gathered from the scale variables. Data gathered from one single-item variable, political position, are also given in Table 4.14.

TABLE 4.14

SCORES ON THE SOCIO-PSYCHOLOGICAL SCALES AND ON POLITICAL POSITION, BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

SOCIO-PSYCHOLOGICAL SCALE VARIABLES	RESPONDENT GROUP								
	HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
	Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
Beliefs about ROTC									
Mean	82.38	92.05	t= 6.83***	83.07	96.42	t=20.94***	87.74	90.01	t= 2.17*
Standard Deviation	13.47	14.93		12.17	11.96		13.11	11.77	
Beliefs about the Army									
Mean	86.31	93.48	t= 5.22***	86.31	101.39	t=22.94***	94.16	97.33	t= 2.71**
Standard Deviation	13.06	14.51		13.12	13.04		14.48	13.67	
Subscription to Military Ideology									
Mean	28.26	30.86	t= 4.66***	27.75	31.39	t=16.28***	28.80	29.72	t= 2.51*
Standard Deviation	5.34	4.95		4.57	4.34		4.58	4.13	
Bureaucratic Tendencies									
Mean	26.64	30.74	t= 5.14***	23.03	25.71	t= 8.05***	22.15	22.96	t=NS
Standard Deviation	7.62	7.58		6.55	6.74		5.91	5.07	
Need for Fate Control									
Mean	15.03	15.32	t=NS	14.53	13.79	t=-4.42***	13.16	12.85	t=NS
Standard Deviation	3.56	3.10		3.41	3.29		3.31	3.36	
Anomy									
Mean	15.91	16.55	t=NS	14.62	14.11	t=-2.62**	12.58	12.29	t=NS
Standard Deviation	3.93	3.71		3.95	3.82		3.48	3.37	
Career Development, Exploration Stage[a]									
Mean	NA	NA	NA	41.98	43.48	t= 3.08**	41.92	40.92	t=NS
Standard Deviation	NA	NA	NA	9.80	9.55		9.32	10.09	
Career Development, Establishment Stage[a]									
Mean	NA	NA	NA	33.14	35.99	t= 5.95***	39.47	39.63	t=NS
Standard Deviation	NA	NA	NA	9.67	9.33		9.29	9.58	
Political Position[b]									
Mean	2.67	2.68	t=NS	2.84	3.05	t= 3.70***	3.22	3.29	t=NS
Standard Deviation	1.10	1.20		0.99	1.02		1.00	0.91	

Note.

1. High scores on the Beliefs about ROTC and Beliefs about the Army scales reflect favorable attitudes; on all other scales, high scores reflect greater possession of the variable being measured.

2. Due to missing values, the number of respondents on which means reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, were data missing from over 5% of respondents.

[a]The Career Development scales were not included in the High School questionnaire.

[b]Unlike the rest of the variables in this table, Political Position was measured by means of a single item, and not by means of a group of scale items. For Political Position: 5= Very conservative; 1= Very Liberal.

*p < .05
**p < .01
***p < .001

As with many of the other variable clusters, the greatest differences were found between the college respondent groups, followed by the high school respondent groups, and lastly by the Army officer respondent groups.

It was found that:

1. High school JROTC members, college ROTC members, and Regular Army officers expressed *more favorable beliefs about ROTC* than did high school non-JROTC students ($p < .001$), college non-ROTC students ($p < .001$), and members of the Active Duty Reserve ($p < .05$).

2. High school JROTC members, college ROTC members, and Regular Army officers expressed *more favorable beliefs about the Army* than did high school non-JROTC students ($p < .001$), college non-ROTC students ($p < .001$), and members of the Active Duty Reserve ($p < .01$).

3. High school JROTC members, college ROTC members, and Regular Army officers expressed *greater subscription to military ideology* than did high school non-JROTC students ($p < .001$), college non-ROTC students ($p < .001$), and members of the Active Duty Reserve ($p < .05$).

4. High school JROTC members and college ROTC members had *stronger bureaucratic tendencies* than high school non-JROTC students ($p < .001$) and college non-ROTC students ($p < .001$).

5. College ROTC students scored *lower on the need for fate control scale* than did college non-ROTC students ($p < .001$).

6. College ROTC students scored *lower on the anomy scale* than did college non-ROTC students ($p < .01$).

7. College ROTC students scored *higher on both career development scales* than did college non-ROTC students ($p < .01$ for the exploration stage; $p < .001$ for the establishment stage). This means that college ROTC students are engaged in more active career planning and exploration than non-ROTC students. They are also more actively concerned about getting establisned in a career.

8. College ROTC students rated themselves as being *more conservative* than did college non-ROTC students ($p < .001$).

All these findings except for that on the anomy scale were in keeping with the tentative career commitment model's hypotheses listed in Figure 1.3, Chapter 1. Indeed there is a close match between socio-psychological profile and participation in ROTC. Whether the match exists prior to participation

or develops subsequent to participation is a crucial question that can only be established in a longitudinal study.[4]

Participants vs. Non-Participants: Information about ROTC/Army

College respondents (only) were given two seven-item information tests about ROTC and the Army. This test was the only component of the questionnaire which had "right" and "wrong" answers. The scoring system was 2 points for each correct answer, and 1 for either a wrong or missing answer. Thus, the score range was 7 to 14 for both information tests. Table 4.15 gives the items in the information test, the correct response to each item, and the proportion of ROTC and non-ROTC respondents who gave a correct response to the test item. Table 4.16 then gives the mean total score on the two tests for the ROTC and non-ROTC students.

Table 4.16 indicates that, not surprisingly, ROTC students had more accurate knowledge about ROTC and the Army than did non-ROTC students ($p < .001$ for both tests).

Examination of the data in Table 4.15 provides valuable information on misperceptions by the general college population about ROTC and the Army. Over 30% of non-ROTC college students believe, *incorrectly*, that:

1. Graduating from ROTC means that you have to serve four years of active duty in the Army;
2. ROTC pays all cadets $100 per month during the freshman and sophomore years of college;
3. One may not join the last two years of ROTC without joining the first two;
4. ROTC requires attending a summer camp the first two years of college;
5. The starting base pay for an Army officer is over $700 per month;

---

[4]For example, the original hypothesis regarding the anomy variable ("High anomy will lead individuals to seek out membership in an organization with strong norms like ROTC/Army"; see Figure 1.3) is not necessarily refuted, since it is not directly tested. It may well be that people with higher anomy originally joined ROTC, and that once such "belonging" was achieved, anomy was reduced.

TABLE 4.15

ITEM BREAKDOWN OF ROTC VS. NON-ROTC
PERFORMANCE ON ROTC/ARMY INFORMATION TEST

Information Test Item	Correct Response	% Non-ROTC Correct (n=879)	% ROTC Correct (n=754)	% Difference
ROTC Information Test				
Graduating from ROTC means that you have to serve four years of active duty in the Army.	False	61.7	89.7	+ 28.0
ROTC pays all cadets $100 per month during the freshman and sophomore years of college.	False	59.1	95.8	+ 36.7
ROTC is available for both men and women.	True	97.2	98.5	+ 1.3
ROTC scholarships are available for each college year.	True	85.2	87.8	+ 2.6
It is possible to join the last two years of ROTC without joing the first two.	True	69.2	82.6	+ 13.4
ROTC requires attending a summer camp the first two years of college.	False	68.7	95.9	+ 27.2
Some ROTC graduates fulfill most of their Army obligation in the reserves.	True	76.7	91.3	+ 14.6
Army Information Test				
The starting base pay for an Army officer is over $700 per month.	False	31.7	36.3	+ 4.6
All officers must serve at least four years active duty.	False	55.0	89.3	+ 34.3
Officers can retire after 15 years duty at one-half of their pay.	False	48.5	72.5	+ 24.0
Post-graduate schooling for officers is completely financed by the Army.	False	28.0	47.0	+ 19.0
All officers must serve in the infantry for at least one year.	False	74.4	91.7	+ 17.3
After an obligated duty period, officers may resign from the Army at any time.	False	25.3	23.4	- 1.9
Officers receive three weeks paid vacation per year.	False	32.7	55.8	+ 23.1

TABLE 4.16

PERFORMANCE ON THE ROTC/ARMY INFORMATION TESTS,
ROTC VS. NON-ROTC COLLEGE STUDENTS

INFORMATION TESTS	COLLEGE STUDENT RESPONDENT GROUP		
	Non-ROTC (n = 879)	ROTC (n = 754)	Test of Difference
ROTC Information Test			
Mean	12.17	13.42	$t = 22.14^{***}$
Standard Deviation	1.29	0.93	
Army Information Test			
Mean	9.95	11.16	$t = 17.70^{***}$
Standard Deviation	1.38	1.38	

6. All officers must serve at least four years active duty;
7. Officers can retire after 15 years duty at one-half of their pay;
8. Post graduate schooling for officers is completely financed by the Army;
9. After an obligated duty period, officers may resign from the Army at any time;
10. Officers receive three weeks paid vacation per year.

Mistaken beliefs 1, 4, and 6 in the preceding list reflect misperceptions that exaggerate the extent of *obligations* cadets take on when they join ROTC. Mistaken beliefs 2, 5, 7, 8, and 10 reflect misperceptions that exaggerate the salary and *fringe benefits* accompanying membership in ROTC/Army. These findings have implications for recruitment advertising. They suggest that there is no need to stress the fringe benefit package accompanying ROTC/Army, as students are well aware of these benefits (indeed think they are more extensive than they actually are). Rather,one aspect of advertising to stress, or at least point out, is the limited nature of obligations contracted by joining ROTC, e.g., the flexibility of the program, and the options at various stages to enter/leave.

Participants vs. Non-Participants: Beliefs about ROTC

The beliefs about ROTC and beliefs about the Army scales were broken down into their component items, so that the network of specific beliefs held by the various respondent groups could be examined. The belief data were also factor analyzed; results of the factor analyses are given in Chapter 8.

The 26 beliefs about ROTC and 28 beliefs about the Army spanned various dimensions of ROTC and Army life which the preliminary interviews carried out in Year 1 of the project had shown to be most salient to cadets' and officers' decision to join, remain in, or drop out of the career path, e.g., discipline in ROTC/Army, the obligation acquired by joining ROTC, the time consumed by ROTC activities, the quality of ROTC instructors and Army supervisors, etc.

The first column of Table 4.17 presents the ROTC belief items in the order in which they were sequenced in the questionnaires. Respondents were asked to indicate the extent to which they agreed with each belief, using

TABLE 4.17

BELIEFS ABOUT ROTC,
BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

BELIEFS ABOUT ROTC	Required? a	RESPONDENT GROUP: HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
		Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
AR01. ROTC helps students develop self-discipline of mind and body.	•	3.51	4.34	$t=6.86^{***}$	3.78	4.24	$t=9.68^{***}$	3.51	3.61	t= NS
AR02. Cadets have a poor image among some people.		2.76	2.63	t= NS	2.51	2.52	t= NS	2.13	2.12	t= NS
AR03. ROTC is excellent training for an Army officer position.	•	4.01	4.25	$t=2.13^{*}$	4.21	4.33	$t=2.62^{**}$	3.56	3.58	t= NS
AR04. ROTC cadets are easy to get along with.	•	2.98	3.45	$t=4.50^{***}$	3.25	3.71	$t=9.62^{***}$	3.62	3.75	t= NS
AR05. Military service helps one fulfill a patriotic duty.	•	3.33	3.80	$t=3.49^{***}$	3.43	4.04	$t=10.31^{***}$	3.31	3.99	t= NS
AR06. Someone close to me (girlfriend/boyfriend, spouse, parent) does not (would not) like my being in ROTC		2.88	3.42	$t=3.59^{***}$	2.70	3.29	$t=8.16^{***}$	3.25	3.42	t= NS
AR07. ROTC provides challenges for the individual.	•	3.60	4.08	$t=4.18^{***}$	3.74	4.37	$t=13.65^{***}$	3.60	3.71	t= NS
AR08. ROTC instructors are easy to get along with.	•	2.96	3.41	$t=4.53^{***}$	3.11	4.13	$t=22.15^{***}$	3.89	4.11	$t=2.72^{**}$
AR09. Joining ROTC satisfies (would satisfy) the desires of my parents and/or other relatives.	•	2.51	3.38	$t=6.81^{***}$	2.37	3.31	$t=15.75^{***}$	2.98	2.91	t= NS
AR10. Drill is not relevant to being a good officer.		3.26	3.29	t= NS	3.33	3.82	$t=7.86^{***}$	3.52	3.00	$t=2.67^{**}$
AR11. Being a member of ROTC is a great way to earn money while going to college.	•	3.47	3.86	$t=3.47^{***}$	3.51	3.90	$t=6.67^{***}$	3.95	3.71	$t=-2.42^{*}$
AR12. Joining ROTC helps one postpone decisions about what to do after college.	•	3.13	3.32	t= NS	3.15	3.18	t= NS	3.18	3.03	t= NS
AR13. ROTC instructors are competent.	•	3.18	3.90	$t=7.64^{***}$	3.40	4.28	$t=21.56^{***}$	3.99	4.11	t= NS
AR14. ROTC helps one get a better civilian job than one could otherwise obtain.	•	3.01	3.53	$t=4.48^{***}$	3.01	3.88	$t=17.20^{***}$	3.28	3.27	t= NS
AR15. ROTC leads to a military commitment that is too long.		2.96	3.17	t= NS	2.86	3.85	$t=18.37^{***}$	3.88	3.94	t= NS
AR16. ROTC helps students develop an awareness of personal goals and values.	•	3.40	3.87	$t=4.17^{***}$	3.46	4.04	$t=12.41^{***}$	3.43	3.58	t= NS
AR17. The ROTC curriculum/materials are of good quality.	•	3.21	3.68	$t=4.63^{***}$	3.31	3.96	$t=14.73^{***}$	3.34	3.45	t= NS
AR18. ROTC requires too much time while in school.		3.00	3.35	$t=3.35^{***}$	3.02	3.40	$t=7.14^{***}$	3.78	3.99	$t=2.42^{*}$
AR19. ROTC helps one develop job-related skills and interests.	•	3.45	3.61	t= NS	3.53	3.55	t= NS	2.79	2.87	t= NS
AR20. ROTC provides a means for having a good time before settling down.	•	2.84	3.04	t= NS	2.64	2.84	$t=3.74^{***}$	2.43	2.58	t= NS
AR21. ROTC involves too much mickey-mouse and too many irrelevant details.		3.01	3.31	$t=2.52^{*}$	2.94	3.33	$t=6.59^{***}$	2.96	3.33	$t=3.64^{***}$

Table 4.17 (continued)

BELIEFS ABOUT ROTC	Recoded? [a]	RESPONDENT GROUP								
		HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
		Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
AR22. ROTC helps students gain experience and ability as a leader.	•	3.52	4.03	t=4.41***	3.87	4.46	t=14.22***	3.93	4.06	t= NS
AR23. ROTC cadets are competent	•	3.12	3.63	t=5.41***	3.24	3.66	t= 9.61***	3.43	3.49	t= NS
AR24. Joining ROTC is a good way to have a job guaranteed upon graduation.	•	3.19	3.24	t= NS	3.74	4.13	t= 7.34***	3.62	3.71	t= NS
AR25. Discipline is overemphasized in ROTC.		2.65	3.03	t= NS	2.97	3.71	t=14.46***	3.92	4.13	t= 2.97**
AR26. ROTC provides an accurate picture of Army life.	•	3.28	3.43	t= NS	2.81	2.49	t=-5.73***	1.91	1.78	t= NS

Note. Due to missing values, the number of respondents on which means reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

[a] Items with a • have been recoded so that, for all items, a 5 reflects a favorable evaluation of ROTC, and a 1 an unfavorable evaluation. Thus means given for items with a • reflect the original mean computed from the questionaire item subtracted from 6.0.

* $p<.05$
** $p<.01$
*** $p<.001$

the following response codes:

1. I strongly agree with the statement
2. I mildly agree with the statement
3. Undecided; don't know
4. I mildly disagree with the statement
5. I strongly disagree with the statement

Items were worded in directions both favorable and unfavorable to ROTC. Responses to items worded in the unfavorable direction were recoded prior to analysis so that, for all items, a 5 reflected a favorable evaluation of ROTC/Army, and a 1 reflected an unfavorable evaluation.

The mean ratings assigned by the respondent groups to the 26 beliefs about ROTC items and the *t*-statistic evaluating the significance of the difference between corresponding means, are presented in Table 4.17. Means for the college and Army officer groups are re-presented in Figure 4.3. In the figure the beliefs are sequenced in order of decreasing evaluation by present ROTC cadets. Thus, the dimensions on the left of the graph are those with which ROTC cadets are well satisfied; the dimensions on the right side of the graph are those with which ROTC cadets are dissatisfied. ROTC would do well to focus some attention on how the latter set of dimensions can be improved.

Not surprisingly, ROTC students in high school as well as college held more favorable beliefs about ROTC than their non-ROTC peers (see Table 4.17). For the college groups, ROTC and non-ROTC students agreed on only three beliefs: a) "Cadets have a poor image;" b) "Joining ROTC helps one postpone decisions about what to do after college;" and (c) "ROTC helps one develop job-related skil and interests." These were the only three items for which the difference between the college ROTC and non-ROTC mean ratings was not statistically significant. On one item,ROTC students expressed a *less* favorable attitude than non-ROTC students; this was the last belief item that "ROTC provides an accurate picture of Army life," which was endorsed more by the non-ROTC students.

As for differences between the Army officer groups, there were six items which were evaluated differently by Regular Army and Active Duty Reserve officers (see Table 4.17). Of these, five were more *favorably* rated by Regular Army officers, who agreed more strongly than Reservists with the statement "ROTC instructors are easy to get along with;" and disagreed more strongly with the statements "Drill is not relevant to being a good officer." "ROTC requires too much time while in school," "ROTC involves too much

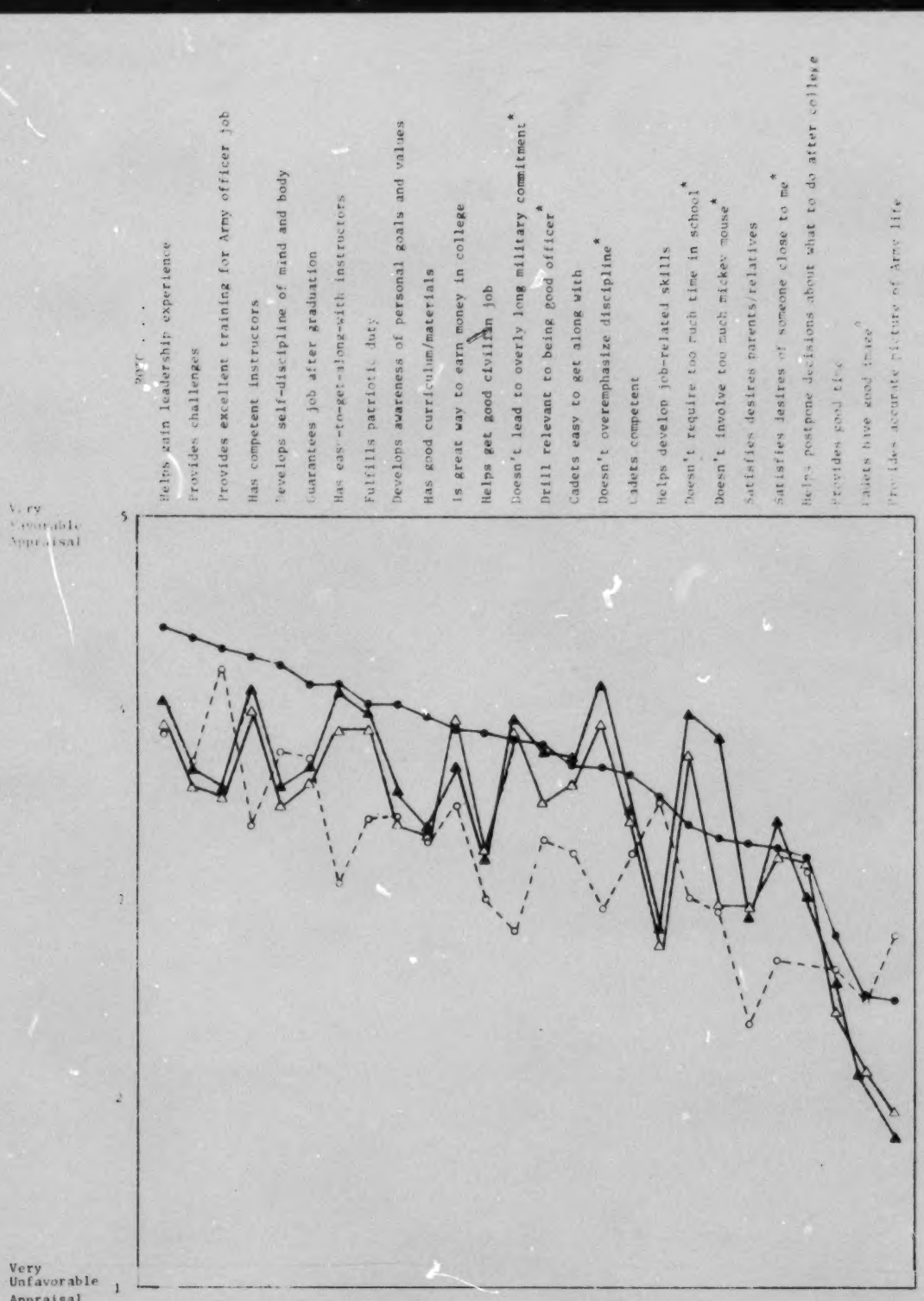
Very Favorable Appraisal
5
4
3
2
1
Very Unfavorable Appraisal
Helps gain leadership experience
Provides challenges
Provides excellent training for Army officer job
Has competent instructors
Develops self-discipline of mind and body
Guarantees job after graduation
Has easy-to-get-along-with instructors
Fulfills patriotic duty
Develops awareness of personal goals and values
Has good curriculum/materials
Is great way to earn money in college
Helps get good civilian job
Doesn't lead to overly long military commitment*
Drill relevant to being good officer*
Cadets easy to get along with
Doesn't overemphasize discipline*
Cadets competent
Helps develop job-related skills
Doesn't require too much time in school*
Doesn't involve too much mickey mouse*
Satisfies desires parents/relatives
Satisfies desires of someone close to me*
Helps postpone decisions about what to do after college
Provides good life
Cadets have good image
Provides accurate picture of Army life

FIGURE 4.3

BELIEFS ABOUT ROTC

○ Beliefs held by non-ROTC College students
● Actual experiences of College ROTC cadets
▲ Retrospective appraisal by Army officers (Regular Army)
△ Retrospective appraisal by Army officers (Reserve)

– – – Expectations
——— Actual (present or past) experiences

*This item was worded in the opposite direction in the survey instrument.

NOTE -- All items have been coded such that
5 = Very Favorable Appraisal
1 = Very Unfavorable Appraisal.

mickey-mouse and too many irrelevant details," and "Discipline is over-emphasized in ROTC." On one item, however, Reservists gave a higher evaluation than Regular Army members. This was the belief that "Being a member of ROTC is a great way to earn money while going to college." This last finding leads one to infer that Reservists to a larger extent than Regular Army members either a) joined ROTC primarily for its financial benefits; or b) perceive past financial benefits as justifying their more temporary stint in the Army.

Examination of Figure 4.3 yields the following additional findings:

1. The Army officer groups' beliefs about ROTC were much more in correspondence with each other than were the college groups' beliefs, in keeping with most previously reported findings on the smaller differences between the officer, as opposed to student, groups. In addition, the close correspondence between the Regular Army and Reserve officer retrospective ratings of ROTC lends credence to these ratings, by documenting that retrospective evaluations are not distorted by one's present status in the system.

2. Beliefs about ROTC held by ROTC cadets were consistently more favorable than either beliefs held by their non-ROTC peers or by Army officers retrospectively evaluating ROTC. The discrepancy between the present cadet and officer (past cadet) evaluations of ROTC is important. Either: a) ROTC programs have improved in quality; or b) present officers were in ROTC at a "bad time" for ROTC, with the draft, the Vietnam War, and anti-ROTC campus demonstrations lowering their respect for their ROTC programs; or c) the quality and utility of ROTC programs goes down in one's eyes once one joins the Army and finds out that ROTC does not provide an accurate picture of Army life. The present cross-sectional data cannot tell us which of these three explanations for the data is the right one. Of course, the explanations are not mutually exclusive; all of them may be partially correct.

3. The only dimensions more favorably endorsed by Army officers than by ROTC cadets were: ROTC does not lead to an overly long military commitment; ROTC does not overemphasize discipline; ROTC does not require too much time while in school.

4. The dimensions on which cadets rated ROTC most favorably were: ROTC helps gain leadership experience; ROTC provides challenges; ROTC provides excellent training for an Army officer job; ROTC has competent instructors; and ROTC develops self-discipline of mind and body. Army officers tended to agree with the first and fourth assessments (regarding leadership experience

and competent instructors) but disagreed with the other three.

5. The dimensions on which cadets as well as Army officers rated ROTC least favorably were: ROTC provides a good time; cadets have a good image; and ROTC provides an accurate picture of Army life. It appears that some effort will have to be spent determining the exact composition of this "poor image" so that it can be combatted with recruitment advertising. It is possible that part of the poor image may disappear in the post-Vietnam years. As far as restructuring ROTC to provide a more accurate picture of Army life is concerned, more research should be carried out to establish exactly what expectations about the Army held while in ROTC are disconfirmed by the Army experience. (The present study provides some leads in this matter, as the next section will show.) ROTC programs could then be restructured to dispel misleading expectations.

Before proceeding to the next variable cluster, mention must be made of the fact that subgroup differences --by race, socioeconomic status (SES) and sex subgroups-- in perceptions of ROTC were analyzed. It was found that, in general:

1. Blacks had more favorable perceptions of ROTC than Whites.

2. Low SES respondents had more favorable perceptions of ROTC than high SES respondents, but this finding was not as strong as that for racial differences.

3. No differences existed between males and females in their perceptions of ROTC.

Participants vs. Non-Participants: Beliefs about the Army

Table 4.18 presents the 28 beliefs about the Army included in the survey questionnaires, the mean endorsement ratings given by respondent groups to the beliefs, and the t-statistic evaluating the significance of the difference between beliefs held by the ROTC versus non-ROTC student groups and by the Regular Army versus Active Duty Reserve officers. As was the case with the beliefs about ROTC items, all items in Table 4.18 have been scored such that a 5 reflects a favorable evaluation of the Army, and a 1 an unfavorable evaluation. Also following the preceding section, the accompanying figure (4.4) re-presents the data gathered from the college and Army officer respondent groups. In the table the dimensions are ordered according to their

TABLE 4.18

BELIEFS ABOUT THE ARMY,
BY MEMBERSHIP IN VARIOUS RESPONDENT GROUPS

BELIEFS ABOUT THE ARMY	Recode? a	RESPONDENT GROUP								
		HIGH SCHOOL SENIORS			COLLEGE STUDENTS			ARMY OFFICERS		
		Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
AA01. The Army does not give its people enough freedom in their personal lives.		2.56	2.61	t= NS	2.46	3.03	t=10.60***	2.79	2.88	t= NS
AA02. The training one gets in the Army is useful in civilian life.	•	3.52	4.02	t=4.24***	3.58	4.16	t=12.19***	3.76	3.69	t= NS
AA15. Discipline is inconsistently applied in the Army.		2.77	2.70	t= NS	2.87	3.09	t= 3.83***	2.14	2.16	t= NS
AA04. Living arrangements are better in the Army than in civilian life.	•	2.67	3.04	t=3.03**	2.37	2.81	t= 8.56***	2.46	2.31	t= NS
AA05. The Army helps give many people a sense of direction.	•	3.60	3.87	t=2.40*	3.74	4.18	t= 9.95***	3.04	3.03	t= NS
AA06. Army people contribute to their country more than civilians.	•	2.88	3.29	t=2.92**	2.41	2.96	t= 9.02***	2.01	2.06	t= NS
AA07. I am not interested in military life for myself.		2.23	3.09	t=5.87***	1.41	3.77	t=24.57***	3.15	3.62	t=4.46***
AA08. I am impressed by the quality of officers in the Army.	•	3.12	3.61	t=4.08***	2.99	3.69	t=13.66***	3.01	3.00	t= NS
AA09. The Army helps its people develop self-discipline of mind and body.	•	3.53	3.88	t=2.98**	3.63	4.13	t=10.90***	3.41	3.60	t=2.24*
AA10. One encounters greater prejudice in the Army than in civilian life.		3.01	3.00	t= NS	3.02	3.43	t= 7.88***	3.61	3.80	t=1.98*
AA11. It is hard to make really good friends in the Army.		3.49	3.45	t= NS	3.61	4.03	t= 8.26***	3.71	4.07	t=3.58***
AA12. The fringe benefits of an Army job are hard to beat in civilian jobs.	•	3.35	3.71	t=3.23***	3.56	4.27	t=14.12***	3.66	3.70	t= NS
AA13. Because of constant mobility, it is hard to lead a normal family life in the Army.		2.74	2.87	t= NS	2.51	2.82	t= 5.42***	2.62	2.69	t= NS
AA14. The Army officer is held in high respect by the general public.	•	3.39	3.52	t= NS	3.27	3.59	t= 6.40***	3.19	3.14	t= NS
AA15. The opportunity to travel is one of the rewarding aspects of Army life.	•	3.90	4.14	t=2.21*	4.05	4.33	t= 6.71***	3.93	4.09	t= NS
AA16. Discipline is overemphasized in the Army.		2.79	2.85	t= NS	2.89	3.58	t=12.64***	3.88	4.23	t= NS
AA17. The Army officer is held in high respect by the majority of my friends.	•	3.09	3.47	t=3.27***	3.04	3.46	t= 7.04***	3.46	3.60	t= NS
AA18. Army officers typically get along well with their supervisors.	•	3.12	3.51	t=3.99***	3.20	3.54	t= 8.61***	3.41	3.44	t= NS
AA19. It is hard to get satisfactory privacy in the Army.		2.74	2.93	t= NS	2.58	3.09	t=10.52***	2.98	3.06	t= NS
AA20. One can have a rewarding social life on an Army base.	•	3.05	3.81	t=6.05***	3.14	3.76	t=12.57***	3.38	3.46	t= NS

TABLE 4.18 (continued)

BELIEFS ABOUT THE ARMY	Recoded?	RESPONDENT GROUP: HIGH SCHOOL SENIORS Non-JROTC (n=985)	JROTC (n=102)	Test of Difference	COLLEGE STUDENTS Non-ROTC (n=879)	ROTC (n=754)	Test of Difference	ARMY OFFICERS A.D. Reserve (n=400)	Regular Army (n=233)	Test of Difference
AA21. There is something immoral about being part of the military.		3.45	3.53	t= NS	3.89	4.38	t= 8.95***	4.46	4.63	t=2.04*
AA22. Recreation and entertainment are better in the Army than in civilian life.	●	2.63	3.21	t=5.19***	2.44	3.01	t=10.89***	2.60	2.73	t= NS
AA23. It is hard to take orders from supervisors.		3.08	3.35	t=2.35*	3.34	3.95	t=11.01***	4.16	4.31	t=2.01*
AA24. In general, people in the Army do more for their country than civilians.	●	2.87	3.26	t=2.78**	2.37	2.91	t= 8.76***	2.69	2.81	t= NS
AA25. The Army does not give its people enough freedom on the job.		2.83	2.81	t= NS	2.77	3.23	t= 9.64***	3.17	3.10	t= NS
AA26. In the Army everyone must be alike.		3.32	3.32	t= NS	3.49	4.01	t= 8.65***	4.02	4.03	t= NS
AA27. Army officers' only contact with their subordinates is giving them orders.		3.09	3.13	t= NS	3.37	4.07	t=13.33***	4.19	4.46	t=3.54***
AA28. Close friendships are not made easily in the Army.		3.51	3.50	t= NS	3.78	4.10	t= 6.18***	3.71	4.03	t= NS

Note. Due to missing values, the number of respondents on which means reported in this table were computed may not always correspond to the "n" given in the table column heading. In no case, however, did over 5% of respondents fail to answer an item.

* Items with a ● have been recoded so that, for all items, a 5 reflects a favorable evaluation of the Army, and a 1 an unfavorable evaluation. Thus means given for items with a ● reflect the original mean computed from the questionaire item subtracted from 6.0.

* p<.05
** p<.01
*** p<.001

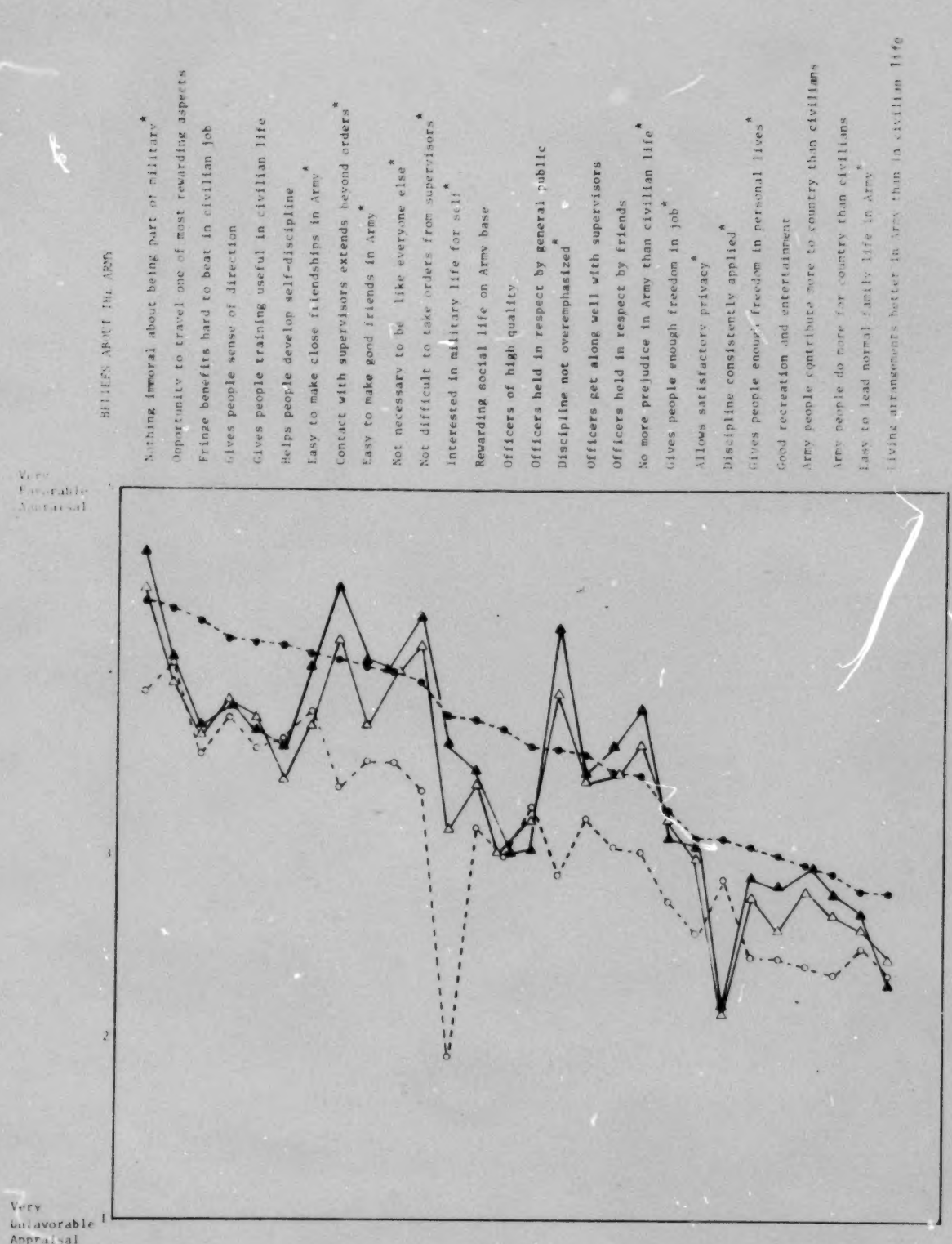
BELIEFS ABOUT THE ARMY
Nothing immoral about being part of military*
Opportunity to travel one of most rewarding aspects
Fringe benefits hard to beat in civilian job
Gives people sense of direction
Gives people training useful in civilian life
Helps people develop self-discipline
Easy to make close friendships in Army*
Contact with supervisors extends beyond orders*
Easy to make good friends in Army*
Not necessary to be like everyone else*
Not difficult to take orders from supervisors*
Interested in military life for self*
Rewarding social life on Army base
Officers of high quality
Officers held in respect by general public
Discipline not overemphasized*
Officers get along well with supervisors
Officers held in respect by friends
No more prejudice in Army than civilian life*
Gives people enough freedom in job*
Allows satisfactory privacy*
Discipline consistently applied*
Gives people enough freedom in personal lives*
Good recreation and entertainment
Army people contribute more to country than civilians
Army people do more for country than civilians
Easy to lead normal family life in Army*
Living arrangements better in Army than in civilian life
Very Favorable Appraisal
5
3
2
1
Very Unfavorable Appraisal

FIGURE 4.4

BELIEFS ABOUT THE ARMY

○ Beliefs held by non-ROTC College Students
● Beliefs held by College ROTC Cadets
▲ Actual experiences of Army officers (Regular Army)
△ Actual experiences of Army officers (Reserve)

- - - Expectations
—— Actual experiences

*This item was worded in the opposite direction in the survey instrument.

NOTE -- All items have been coded such that
5 = Very Favorable Appraisal;
1 = Very Unfavorable Appraisal.

sequencing in the questionnaire; in the figure the dimensions are ordered according to decreasing favorability of evaluation by ROTC cadets.

There is one important difference in interpretation of data on beliefs about ROTC and data on beliefs about the Army. As mentioned in the preceding section, beliefs about ROTC held by non-ROTC students can be conceptualized as *expectations*, beliefs held by ROTC students as current *experiences*, beliefs held by Army officers as *retrospective evaluations* of experiences.

For beliefs about the Army, beliefs held by *both* ROTC and non-ROTC students are *expectations*, and beliefs held by Army officers reflect *current experiences*.

Examination of data presented in Table 4.18 and in Figure 4.4 reveals the following findings:

1. As with the beliefs about ROTC data, the Army officer groups' beliefs about the Army were much more in correspondence with each other than were the college groups' beliefs. Of the 28 beliefs in the questionnaire, 15 significantly distinguished JROTC high school seniors from their classmates, 28 (every single one) significantly distinguished ROTC college students from their peers, and only seven significantly distinguished Regular Army officers from officers in the Active Duty Reserve. Without exception, the (significantly) more favorable ratings were given by the ROTC and Regular Army groups.

2. Again as with the beliefs about ROTC data, beliefs about the Army held by ROTC cadets were generally more favorable than either beliefs held by their non-ROTC peers or by Army officers. There were five exceptions to this finding, five items on which Army officers rated the Army more favorably than did ROTC cadets. These beliefs, endorsed more strongly by officers than by cadets, were: there is nothing immoral about being part of the military; contact with supervisors extends to more than taking orders; it is not difficult to take orders from supervisors; discipline is not overemphasized in the Army; and there is less prejudice in the Army than in civilian life. The hypothesis may be raised that experience in the Army dispels prior concerns about these dimensions of Army life. A longitudinal study could test this hypothesis.

3. On the other hand the following dimensions were rated much *less* favorably by officers than by cadets (difference in mean rating $\geq .60$):

consistent discipline; freedom in personal life; development of self-discipline; contribution to country; fringe benefits of the job. The hypothesis may be raised that experience in the Army disconfirms prior positive expectations about these dimensions of Army life. Again, a longitudinal study could test this hypothesis.

4. It is interesting to note that while officers generally believe that discipline is not overemphasized in the Army, they simultaneously believe (contrary to ROTC cadets' expectations) that discipline is *inconsistently* applied in the Army.

5. The most favorable beliefs about the Army held by ROTC cadets were: there is nothing immoral about being part of the military; the opportunity to travel is one of the Army's most rewarding aspects; the Army's fringe benefits are hard to beat in a civilian job; the Army gives people a sense of direction; the Army gives people training useful in civilian life; and the Army helps people develop self-discipline.

6. There was unanimous consensus among all respondent groups that the quality of living arrangements in the Army and the difficulty of leading a normal family life in the Army were its least satisfactory dimensions. Also, respondents did not believe that Army people contribute more to the country than do civilians. These findings complement those reported under the satisfaction with job dimensions section in which geographic desirability, stability of home life, and contribution to society were three of the five job dimensions on which an Army career received the lowest ratings.

Analysis of beliefs about the Army by race, SES, and sex subgroups showed that, as was the case with beliefs about ROTC, Blacks and low SES groups had more favorable perceptions of the Army than whites or high SES groups. However, these differences were not as pronounced as the differences obtained for the ROTC belief items. No differences in male versus female perceptions of the Army were found. Chapter 8 delves further into this notion of images of Army life, by reporting the results of factor analyses done on the Army belief items for the various cross-sectional respondent groups.

Discriminant Function Analyses of Participants vs. Non-Participants

So far this chapter has presented findings on determinants of participation in the ROTC/Army career path as gleaned from bivariate analyses between: a) each of the career commitment model's variable clusters, and b) membership in the participation groups of interest in the present study (ROTC cadets versus the general student population; Regular Army members versus members of the Active Duty Reserve).

Having gone through these bivariate analyses in detail for all the variables in the tentative model of career commitment, an attempt is now made to summarize the determinants of participation in the ROTC/Army career path using as small a predictor variable subset as possible. Many of the predictor variables in the career commitment model intercorrelate with one another. If two highly intercorrelated predictor variables (such as father in the military and contact with military families while growing up) are found to each correlate highly with participation in ROTC, it is possible that prediction of participation in ROTC will not be enhanced by knowing respondent's scores on both variables. Knowing respondents' scores on only the first, or only the second, variable may enable one to do as good a job in predicting participation as knowing the *two* scores.

Pruning the participation-predictor set down to a manageable number of components is particularly important in the present instance because, as the first table in this chapter (Table 4.1) pointed out, there were 204 predictor variables studied, of which 145 or 73.2% were significantly related to participation in college ROTC. If the goal is to *explore* and *understand* the phenomenon of participation, data from all 145 variables would be valuable. If the goal is to *predict* participation, one likely will not need to know or collect this much data.

The statistical tool used to isolate the most potent predictors of participation in ROTC was stepwise discriminant function analysis. Stepwise discriminant function analysis is a method for isolating from among a universe of variables that subset which best separates two or more groups of people from each other. In the present instance the groups of interest are the *ROTC versus non-ROTC student groups*. No attempt was made to separate the Regular Army and Active Duty Reserve officer groups because the bivariate

analyses just reported showed these two groups to be quite similar in their background and value-interest-aspiration-attitude profile. Moreover, both Army groups in the present study were once participants in college ROTC, and membership in both groups was thus completely determined by prior participation in ROTC (there are routes other than ROTC to becoming an Army officer -- e.g., West Point and Officer Candidate school -- but the ROTC route to becoming an Army officer is the sole focus of the present study).

The Groups of Interest

There are three major entry points into ROTC: one is as a high school student; the second is as a college freshman (Basic ROTC); the third is as a college junior (Advanced ROTC program). In order to try to uncover determinants of entry into ROTC at each of these entry points, three discriminant function analyses were conducted.

The first analysis was aimed at maximizing separation between high school seniors in JROTC and high school seniors not in JROTC. The second was aimed at maximizing separation between cadets in Basic ROTC and non-ROTC freshmen and sophomores. The third was aimed at maximizing separation between cadets in Advanced ROTC and non-ROTC juniors and seniors.

The Input Variables

Variables used as input to the three discriminant analyses were those which the preceding sections of this chapter showed to be significantly related to participation in ROTC. In the interest of parsimony, the computer program used (stepwise discriminant analysis program of the Statistical Package for the Social Sciences) was instructed to stop after 17 iterations of putting "good predictor" variables into, and removing "bad predictor" variables from, the discriminant function equation.

Results of the Three Stepwise Discriminant Function Analyses

The results of the analysis for high school students, discriminating between students belonging to JROTC and non-members of JROTC, are given in Table 4.19. The discriminant function, consisting of 16 final variables, correctly classified 78.7% of the cases. Most of the errors were false positives (non-JROTC students classified as belonging to JRTOC). The canonical correlation between the predictor variables and group membership was .41.

TABLE 4.19

STEPWISE DISCRIMINANT FUNCTION ANALYSIS

FOR HIGH SCHOOL MEMBERSHIP IN JROTC

RELATIVE CONTRIBUTION OF EACH VARIABLE INCLUDED IN THE FUNCTION:	
VARIABLE SELECTED	STANDARDIZED DISCRIMINATION COEFFICIENT
Socioeconomic Status (SESO)	-.49172
Score on Attitudes Towards ROTC Scale (ATTROTC)	-.40446
Social Contacts with Military People (MILSOC)	.35735
Importance of Salary (SAL)	-.34527
English Abilities (ENGABL)	-.32396
Father's Military Experience (FRMILX)	-.27629
Extracurricular Activities in High School (XACTHS)	.21878
Score on Military Ideology Scale (MILIDE)	-.21846
Importance of Leadership (LDR)	.21147
Friends in ROTC (ROTCFR)	.18568
Friends' Rating of Army Officer Carreer (FRRTAC)	.16455
Religious Upbringing (RLGUP)	-.15371
Age (AGE)	-.12026
Siblings in ROTC (ROTCSB)	.11719
Most Importance Personal Value (MSTIMP)	-.11534
Score on Attitudes Towards the Army Scale (ATTARMY)	-.07292

Note.

1. Grouping of Cases by Function:

	Predicted JROTC	Predicted Non-JROTC
Actual JROTC Members	51	17
Actual Non-JROTC Members	150	573

73.7 of the cases were correctly predicted.

2. Separation of the Groups by the Function:

   Canonical correlation = .41

   Rao's V (analogous to Mahalonobis distance for 2 groups) = 159.05

3. Percent Variance in the Function explained by JROTC membership = 16

The percent of variance in the function explained by membership in JROTC was 16%. The variables contributing to the function most heavily were socio-economic status, attitudes towards ROTC, social contact with military people, the importance of salary in a job, abilities in English, and father's military experience.

Table 4.20 indicates the results of the discriminant analysis for ROTC membership among college freshmen and sophomores, while Table 4.21 gives the same analysis results for college juniors and seniors. The function for lowerclassmen separated the ROTC students from the non-ROTC students better than the high school function (canonical r of .67 compared to .41) and it classified a slightly greater percentage of cases correctly (79.57%). The prediction errors were much more evenly split between the false positive and false negative groups. The lowerclassmen function was also explained better by ROTC membership (45% of the variance) than was the high school function. The upperclassmen function was a further improvement over the lowerclassmen function, with more separation of the ROTC and non-ROTC groups (canonical r = .74), more cases correctly classified (85.42%), and a higher percent variance explained by the ROTC membership (55%).

It is interesting to note the variables which contributed most heavily to the two college functions (Tables 4.20 and 4.21). Attitudes toward ROTC and toward the Army were very important in discriminating between freshmen and sophomore ROTC members and non-ROTC members, with some job dimensions (leadership satisfaction, salary, feedback) emerging with lesser importance. Attitudes towards the Army remained the heaviest influence for the function discriminating between ROTC and non-ROTC juniors and seniors, but *attitudes towards ROTC were not even included* in the upperclassmen function! Social factors (parental ratings of Army career, social contacts with the military) and military ideology also contributed heavily to the upperclassmen function.

Summary of Discriminant Function Analyses

Two major general findings are discernible from the discriminant analyses:

1. Results of the three discriminant function analyses confirm the general finding from the previously discussed bivariate analyses, that differences between the ROTC and non-ROTC groups become larger as the ROTC group gets further along the ROTC/Army career path. The cause of this general finding

TABLE 4.20

STEPWISE DISCRIMINANT FUNCTION ANALYSIS FOR COLLEGE FRESHMEN'S AND SOPHOMORES' MEMBERSHIP IN ROTC (BASIC PROGRAM)

RELATIVE CONTRIBUTION OF EACH VARIABLE INCLUDED IN THE FUNCTION:	
VARIABLE SELECTED	STANDARDIZED DISCRIMINATION COEFFICIENT
Score on Attitudes Towards ROTC Scale (ATTROTC)	-.89698
Score on Attitudes Towards the Army Scale (ATTARMY)	-.73456
Leadership: Army Satisfaction Rating (LDRSHPS)	.47290
Salary Expected in the Future (FTRSAL)	-.43700
Importance of Feedback (FDBCK)	-.42702
Feedback: Army Satisfaction Rating (FDBCKS)	.40937
Social Contacts with Military People (MILSOC)	.39438
English Abilities (ENGABL)	-.39274
Military Families in Neighborhood Growing Up (MILNBH)	.34845
Importance of More Schooling (MRSCH)	.34353
Friends' View of the Military (FRVWMI)	.30657
Contributing to Society: Army Satisfaction Rating (CTRBSCS)	-.30462
Importance of Stable Home Life (STBLTY)	-.27374
Importance of Helping Others (HLPOTH)	-.25417
Religious Upbringing (RLGUP)	-.25044
Personal Freedom: Army Satisfaction Rating (PRSFRDS)	-.21927
Job Security: Army Satisfaction Rating (JBSECS)	-.21024

Note

1. Grouping of Cases by Function:

	Predicted ROTC	Predicted Non-ROTC
Actual ROTC Members	192	47
Actual Non-ROTC Members	57	213

79.57% of the cases were correctly predicted.

2. Separation of the Groups by the Function:

   Canonical correlation = .67

   Rao's V (analogous to Mahalanobis distance for 2 groups) = 418.09

3. Percent Variance in the Function explained by ROTC membership = 45%

TABLE 4.21

STEPWISE DISCRIMINANT FUNCTION ANALYSIS FOR COLLEGE JUNIORS' AND SENIORS' MEMBERSHIP IN ROTC (ADVANCED PROGRAM)

RELATIVE CONTRIBUTION OF EACH VARIABLE INCLUDED IN THE FUNCTION:

VARIABLE SELECTED	STANDARDIZED DISCRIMINATION COEFFICIENT
Score on Attitudes Towards the Army Scale (ATTARMY)	-.50627
Parents' Rating of Army Officer Career (PARTAC)	-.31460
Social Contacts with Military People (MILSOC)	.29689
Score on Military Ideology Scale (MILIDE)	-.27235
Social Science Abilities (SSABL)	.24290
Grade Point Average in College (GPACLG)	-.24194
Highest Degree Hoped for (HGHDGR)	-.23534
Importance of Working with Interesting People (INTPPL)	-.21524
Physical Science Interests (PSINT)	.19421
Job Security: Army Satisfaction Rating (JBSECS)	-.16944
Leadership: Army Satisfaction Rating (LDRSHPS)	.16396
Stable Home Life: Army Satisfaction Rating (STBLTYS)	-.14592
JROTC Program in High School (HSJRTC)	-.14023
Friends' View of the Military (FRVWMI)	.13975
English Interests (ENGINT)	-.13586
Most Important Personal Value (MSTIMP)	-.12653
Number of Different Communities Lived In (DIFCOM)	-.11988

Note.

1. Grouping of cases by the Function:

	Predicted ROTC	Predicted Non-ROTC
Actual ROTC Members	212	36
Actual Non-ROTC Members	34	198

85.42% of the cases were correctly predicted.

2. Separation of the Groups by the Function:

   Canonical correlation = .74

   Rao's V (analogous to Mahalonobis distance for 2 groups) = 576.12

3. Percent Variance in the Function explained by ROTC membership = 55%

is not determinable from the available cross-sectional data. Is it the case that ROTC and the Army mold and change their members' socio-psychological profile; or is it the case that only people with a particular profile join ROTC; or is it the case that all kinds of people join ROTC but "deviants" (from the military mold) drop out? The study is not able to choose among these alternative causal explanations. In all probability, the true career evolution process encompasses *all* these mechanisms.

2. A second important finding is that attitudes towards ROTC no longer discriminate between Advanced ROTC members and their non-ROTC peers, once attitudes towards the Army are controlled for. Cadets in Advanced ROTC are behaviorally committed to a period of obligated Army service. It appears that *future* expectations govern the career participation/commitment process to a greater extent than current experiences, once a behavioral commitment has been made to the career.

CHAPTER 5

DETERMINANTS OF COMMITMENT AMONG ROTC/ARMY CAREER PATH PARTICIPANTS

The previous chapter addressed the question: Who joins the ROTC/Army career path? This chapter will build on the previous one by addressing the question: Among participants in the ROTC/Army career path, who are highly committed to ROTC/Army, i.e., who intend to remain in the ROTC/Army career path?

The chapter will follow closely the previous chapter's organization. Each variable cluster in the tentative model will be examined for its bivariate relationship with career commitment among ROTC cadets and Army officers. Then summary regression analyses will be conducted to isolate the best predictor subset among the bivariate predictors of commitment.

Before going through the tentative model's variables to determine the extent to which these correlate with commitment, a brief discussion will be presented on the relationship between the sampling stratification variables and commitment.

The Sampling Stratification Variables and Commitment

The High School Stratification Variables and Commitment

Twelve high schools participated in the study. The schools were stratified by type of community in which located (urban, suburban, rural) and presence of JROTC program in school (yes, no). Chapter 2 gave the sampling procedure details.

The mean commitment--i.e., mean score on the high school career commitment scale--of seniors attending each of the 12 high schools is presented in Table 5.1. An overall significant difference was found among the school means ($p < .001$), with seniors from the sole military high school in the study having by far the highest commitment to ROTC/Army.

Table 5.2 presents the mean commitment among the high school senior sample, broken down by the school stratification variables. Table 5.3 then presents results of an analysis of variance conducted with commitment as the dependent variable and the stratification variables as independent variables.

TABLE 5.1

COMMITMENT SCORES OF

HIGH SCHOOL SENIORS, BY SCHOOL ATTENDED

HIGH SCHOOL NUMBER	SCHOOL STRATIFICATION CLASSIFICATION		NUMBER OF SENIORS PARTICIPATING IN STUDY	ROTC/ARMY COMMITMENT SCORES	
	TYPE OF COMMUNITY	DOES SCHOOL HAVE JROTC PROGRAM?		MEAN[a]	STANDARD DEVIATION
1	Urban	No	91	3.26	1.69
2	Suburban	Yes	38	3.58	2.14
3	Suburban	Yes	138	3.06	1.72
4[b]	Suburban	Yes	22	5.77	2.47
5	Suburban	No	76	3.76	1.68
6	Rural	Yes	32	4.91	2.18
7	Urban	No	123	3.26	1.68
8	Urban	Yes	128	3.22	1.67
9	Suburban	No	171	3.15	1.67
10	Rural	No	81	4.78	2.18
11	Suburban	Yes	41	4.34	2.21
12	Urban	No	148	4.91	2.29

Note. The twelve commitment means are significantly different from one another: $F = 16.51$; $df = 11$; $p < .001$.

[a]For the high school sample, career commitment could range from 2 - 10.

[b]This school is a military high school.

TABLE 5.2

MEAN COMMITMENT SCORES OF HIGH SCHOOL SENIORS,
BY LOCATION OF SCHOOL AND PRESENCE IN SCHOOL OF JROTC PROGRAM

TYPE OF COMMUNITY	PRESENCE IN SCHOOL OF JROTC PROGRAM	
	SCHOOL DOES HAVE PROGRAM	SCHOOL DOES NOT HAVE PROGRAM
Urban	4.12	3.26
Suburban	3.61	3.34
Rural	4.91	4.78

TABLE 5.3

ANALYSIS OF VARIANCE OF ROTC/ARMY COMMITMENT
AMONG HIGH SCHOOL SENIORS, BY SCHOOL STRATIFICATION VARIABLES

SOURCE	df	MS	F
Type of Community (A)	2	95.47	24.52***[a]
Presence of JROTC Program in School (B)	1	74.17	19.04***[b]
A x B	2	12.43	3.19*
Error	1083	3.89	

Note: Commitment means for significant effects:

- Location of School (Rural: 4.81; Urban: 3.75; Suburban: 3.47
- Presence of JROTC Program in School (JROTC: 3.95; No JROTC: 3.52)
- Location of School x Presence of JROTC Program

(JROTC Urban: 4.12
JROTC Suburban: 3.61
JROTC Rural: 4.91
No JROTC Urban 3.26
No JROTC Suburban: 3.34
No JROTC Rural: 4.78)

[a]This result held up even when JROTC members were eliminated from the sample: $F = 28.72$, $p < .001$.

[b]This result held up even when JROTC members were eliminated from the sample: $F = 10.32$, $p < .002$.

*$p < .05$
***$p < .001$

Note from Table 5.3 that both stratification variables, as well as their interaction, were significantly related to commitment. As far as type of community was concerned, students from rural high schools had the highest commitment, followed by students from urban high schools, and finally by students from suburban high schools ($p < .001$). This result is especially striking when one considers the fact that the sole military high school, whose students had the highest mean commitment of the 12 participating high schools, is a suburban school (and thus pulls up the suburban mean).

It was also found that students from high schools offering JROTC had higher mean commitment than students from high schools without a JROTC program ($p < .001$). Interaction of type of community and presence of JROTC program in school was significant, with the JROTC urban commitment mean being higher than the JROTC suburban mean, but the no-JROTC urban mean being lower than the no-JROTC suburban mean ($p < .05$).

The significance of the two main effects held up even when the analysis was redone only on students *not* in JROTC, in order to correct for disproportionate representation of JROTC members across the sampling strata ($p < .001$ for type of community, and $p < .002$ for presence of JROTC program in school).

One concludes that (a) an ROTC/Army career is most attractive to rural residents, and least attractive to suburban residents; (b) in keeping with findings reported in the previous chapter, presence of a JROTC high school program is correlated with higher recruitment and commitment rates among attending students. Two possible explanations emerge for the latter findings. Following the career modelling phenomenon, one could speculate that the finding is due to a direct cause-and-effect relationship between early exposure to a career and subsequent participation and commitment. Alternately, one could account for the correlation between presence of a JROTC program and commitment by the assumption that communities favorably disposed to ROTC/Army and who would encourage children to think well of military service are also communities that encourage school systems to offer JROTC. In either case, secondary socialization conditions are shown to affect commitment strikingly.

The College Stratification Variables and Commitment

Eleven colleges participated in the study. The schools were stratified by ROTC region (1, 2, 3, or 4), ownership (public, private), and size (small, medium, large). Chapter 2 gave the sampling procedure details.

The mean commitment of ROTC cadets attending each of the 11 colleges is presented in Table 5.4. Data from non-ROTC students were not included in the analyse for college students because these students had extremely low commitment to a ROTC Army career. Only a small minority of them (6.0%) considered a military officer career as being either the first, second, or third most likely career in which the would end up (see Table 4.10 in Chapter 4). Table 5.4 indicates that an overall significant difference in mean commitment was found for cadets in the 11 schools ($p < .001$).

To try to account for these differences, an analysis of variance was run with commitment as the dependent variable and ownership of school, size of school, ROTC program (Basic or Advanced), and possession of an ROTC scholarship as independent variables. Table 5.5 gives the mean commitment score for cadets in each cell of t independent variable matrix. Table 5.6 then presents the results of the analysis of variance.

Table 5.6 shows that ownership of school attended was not related to commitment, but size of school attended, ROTC program, and possession of an ROTC scholar ship were all significantly related to commitment. As far as size of school was concerned, cadets from small schools had the highest commitment, followed by cadet from medium-sized schools, and, finally by cadets from large schools ($p < .01$). Cadets in Advanced ROTC were more committed than cadets in Basic ROTC ($p < .001$). Cadets with an ROTC scholarship were more committed than cadets without a scholarship ($p < .001$). The last two findings are not surprising in light of the fact that the career commitment scale used encompassed both behavioral and attitudinal indices, and both participation in Advanced ROTC and possession of a scholarship involve behavioral commitment to a period of obligated Army service.

The fact that differences in commitment were found among the schools and stratification variables used in the study has implications for future research in the area of ROTC/Army career commitment. It means that further attention should be paid to the school and ROTC program context in which cadets operate, because these variables influence commitment.

TABLE 5.4

COMMITMENT SCORES OF COLLEGE ROTC STUDENTS, BY SCHOOL ATTENDED

COLLEGE NUMBER	SCHOOL STRATIFICATION CLASSIFICATION			NUMBER OF ROTC CADETS PARTICIPATING IN STUDY	ROTC/ARMY COMMITMENT SCORES	
	ROTC REGION	OWNERSHIP	SIZE		MEAN[a]	STANDARD DEVIATION
1	1	Private	Medium	19	28.54	7.56
2	1	Private	Small	44	29.60	5.16
3	2	Public	Medium	85	30.25	6.55
4	1	Public	Medium	35	32.71	5.02
5	1	Public	Small	156	30.02	7.01
6	4	Public	Large	76	32.33	5.22
7	1	Public	Small	138	28.51	7.58
8	3	Public	Medium	62	31.39	5.90
9	3	Public	Medium	51	32.31	6.44
10	2	Public	Large	65	31.19	5.67
11	2	Private	Small	23	32.59	4.29

Note. The eleven commitment means are significantly different from one another:

$F = 3.55$; $df = 10$; $p < .001$.

[a]For the college ROTC sample, career commitment could range from 8 - 40.

TABLE 5.5

MEAN COMMITMENT SCORES OF COLLEGE ROTC STUDENTS, BY OWNERSHIP AND SIZE OF SCHOOL ATTENDED, AND BY YEAR IN SCHOOL AND POSSESSION OF AN ROTC SCHOLARSHIP

SCHOOL STRATIFICATION VARIABLES (OWNERSHIP AND SIZE)	RESPONDENTS IN BASIC ROTC (MS I and II)		RESPONDENTS IN ADVANCED ROTC (MS III and IV)	
	RESPONDENTS WITH AN ROTC SCHOLARSHIP	RESPONDENTS WITHOUT AN ROTC SCHOLARSHIP	RESPONDENTS WITH AN ROTC SCHOLARSHIP	RESPONDENTS WITHOUT AN ROTC SCHOLARSHIP
Public Colleges				
Small	33.63	26.86	35.50	31.06
Medium	35.43	28.91	34.51	31.57
Large	32.23	30.55	34.13	32.32
Private Colleges				
Small	31.00	30.33	31.07	30.34
Medium	35.05	24.43	32.29	31.86
Large[a]	-	-	-	-

[a]There were no schools in the Private-Large category.

TABLE 5.6

ANALYSIS OF VARIANCE OF ROTC/ARMY COMMITMENT

AMONG COLLEGE ROTC STUDENTS

SOURCE	df	MS	F
Ownership of School Attended (A)	1	38.08	1.03
Size of School Attended (B)	2	188.50	5.07**
ROTC Program (C)	1	1296.87	34.90***
Possession of ROTC Scholarship (D)	1	1224.08	32.94***
A x B	1	99.85	2.69
A x C	1	68.10	1.83
A x D	1	71.57	1.93
B x C	2	43.57	1.17
B x D	2	79.66	2.14
C x D	1	134.85	3.63
A x B x C	1	62.99	1.70
A x B x D	1	76.60	2.06
A x C x D	1	0.05	<1
B x C x D	2	38.26	1.03
A x B x C x D	1	44.85	1.21
Error	732	37.16	

Note. Commitment means for significant effects:

- Size of School Attended (Small: 29.56; Medium: 31.16; Large: 31.81)
- ROTC Program (Basic ROTC: 28.89; Advanced ROTC: 32.19)
- ROTC Scholarship (Yes: 33.82; No: 29.57)

**$p < .01$
***$p < .001$

The Army Stratification Variables and Commitment

The Army officer sample was stratified by period of Army service obligation (early, middle, late), type of Army service (Regular Army, Active Duty Reserve), and possession of an ROTC scholarship while in college. Commitment means for each cell of this stratification matrix are presented in Table 5.7.

Results of an analysis of variance conducted with the stratification variables as independent variables and commitment as the dependent variable are presented in Table 5.8. Significant main effects were found for period of obligation and type of Army service; the interaction between these two variables was also significant. As far as the period of obligation main effect was concerned, officers in the first year of obligated service had highest commitment, followed by officers midway through their period of obligated service, and finally, by officers in their last six months of obligated service ($p < .01$). Regular Army officers reported greater commitment to an Army career than did Active Duty Reserve officers ($p < .001$). Examination of means among the period of obligation x type of Army service subgroups revealed that the overall drop in commitment among officers late in their period of obligated service was primarily due to the steep drop in commitment among *Reserve* officers in their last six months of obligated service. Regular Army officers had rather homogeneous commitment scores across the three period of obligation strata. The low commitment exhibited by Reservists in their last six months of obligated service is not surprising. These are the people soon "getting out" of the career path.

What *is* surprising is the finding that possession of an ROTC scholarship while in college was *not* related to commitment among Army officers. Apparently, ROTC scholarships attract students to ROTC, increase ROTC participation rates, and correlate with ROTC/Army commitment among ROTC students. However, the effect of the scholarships on commitment is temporary, and vanishes at the Army obligated service stage. Further analysis of the effects of ROTC scholarship by year in school and duration of Army service is presented in Chapter 8's trend analyses.

Correlates of ROTC/Army Career Commitment Among ROTC Cadets and ROTC-Graduate Army Officers: A Summary

The previous section discussed the relationship between the sampling stratification variables and commitment. This section now turns to an examination of

TABLE 5.7

COMMITMENT SCORES OF ARMY OFFICERS, BY TYPE OF SERVICE, POSSESSION OF AN ROTC SCHOLARSHIP, AND PERIOD OF ARMY SERVICE OBLIGATION

PERIOD OF ARMY SERVICE OBLIGATION	REGULAR ARMY		ACTIVE DUTY RESERVE	
	ROTC SCHOLARSHIP	NO ROTC SCHOLARSHIP	ROTC SCHOLARSHIP	NO ROTC SCHOLARSHIP
Early (First Year)	22.88	22.63	20.81	19.92
Middle	22.39	20.95	19.88	20.83
Late (Last Six Months)	21.82	23.58	15.31	16.90

Note. For the Army Sample, Career Commitment could range from 7 - 35.

TABLE 5.8

ANALYSIS OF VARIANCE OF ROTC/ARMY COMMITMENT AMONG ROTC-GRADUATE ARMY OFFICERS

SOURCE	df	MS	F
Period of Obligation (A)	2	299.48	4.90**
Type of Army Service (B)	1	1362.13	22.30***
Possession of ROTC Scholarship (C)	1	6.09	<1
A x B	2	381.39	6.25**
A x C	2	70.48	1.15
B x C	1	26.56	<1
A x B x C	2	32.69	<1

Note. Commitment means for significant effects:

- Period of Obligation (Early: 21.00; Middle: 20.98; Late: 19.21)
- Type of Army Service (Regular Army: 22.23; Active Duty Reserve: 19.45)
- Period of Obligation x Type of Army Service

(Regular Army Early: 22.77
Regular Army Middle: 21.74
Regular Army Late: 22.55
Active Duty Reserve Early: 20.36
Active Duty Reserve Middle: 20.59
Active Duty Reserve Late: 16.54)

**p < .01
***p < .001

the relationship between each of the career commitment model's component variables and commitment. Table 5.9 summarizes these findings; they will then be reported in detail in subsequent sections of this chapter.

Because the chapter deals with correlates of ROTC/Army commitment *among those already in the career path*, all the data to be discussed hereon will be restricted to data gathered from the 754 ROTC college cadets and the 634 Army officers who participated in the study.

The third column of Table 5.9 indicates that there were 219 variables analyzed. The last fifteen of these (reason for joining ROTC, 13 factors related to ROTC and Army programs, and Army branch) were not examined in Chapter 4 because these items were not answered by the non-ROTC comparison groups. For the college cadets 180 of the 219 variables were evaluated for their relationship to the cadets' career commitment scale score; 131 or 72.7% of the variables evaluated were significantly related to commitment. For the Army officers, 181 of the 219 variables were evaluated for their relationship to the officers' career commitment scale score; 128 or 70.7% of the variables evaluated were significantly related to commitment. The tentative model was thus highly successful in isolating not only good correlates of *participation* in ROTC (as Chapter 4 demonstrated), but also good correlates of *commitment* to ROTC and the Army among career path participants. The following sections examine in detail the nature of the relationship between each of the model's variables and commitment. Since the previous chapter described the variables in detail, no variable descriptions will be repeated here. Rather, the discussion will focus immediately on the relationship between the variables and commitment.

Commitment and Demographic Profile

Sixteen demographic items were included in the questionnaire. The variables studied, and their relationship with career commitment are given in Table 5.10. While eight of the variables were significantly related to commitment among ROTC cadets and six were significantly related to commitment among Army officers, only one significant finding applied to both cadets and officers in a consistent direction. This was the variable marital status. Among both the cadet and officer samples, married, separated and divorced

TABLE 5.9

SUMMARY OF THE EXTENT TO WHICH VARIABLE CLUSTERS IN THE CAREER COMMITMENT MODEL WERE RELATED TO COMMITMENT TO ROTC/ARMY

Box No. in Career Commitment Model (Figure 1.2)	Name of Variable Cluster	Total Number of Variables In Cluster	COLLEGE ROTC STUDENTS		ARMY OFFICERS		Table Reference
			No. of Applicable Variables	No. of Variables Significantly Related to Commitment to ROTC/Army	No. of Applicable Variables	No. of Variables Significantly Related to Commitment to Army	
1	Demographic Variables	16	16	8	14	6	5.10
1	Father's Military Experience	2	2	1	2	1	5.11
1	ROTC and Military Experience of Other Family and Friends	10	10	2	10	3	5.11
3	Contact with Military Families	2	2	1	2	1	5.11
3	Parents' and Friends' Military Attitudes	4	4	4	4	4	5.11
1	Family Stability	2	2	1	2	1	5.12
2	Aptitudes & Achievements	8	8	4	8	4	5.13
3	College Major	2	2	1	2	1	5.14
3	Participation in Extracurricular Activities	11	11	2	11	1	5.15
4	Personal Values	14	(a)		(a)		5.16
4	First Career Being Considered	15	(a)		(a)		5.17
4	Interests & Aspirations	10	10	5	10	4	5.18
5	Importance Ratings, Job Dimensions	21	21	13	21	14	5.19
7, 11, 14	Army Satisfaction Ratings, Job Dimensions	21	21	21	21	21	5.20
5	Socio-Psychological Scales	8	8	7	8	7	5.21
5	Political Position	1	1	1	1	1	5.21
6	ROTC and Army Information Tests	2	2	2	0	-	5.21
7, 9	Beliefs About ROTC	26	26	24	26	23	5.22
7, 11, 14	Beliefs About Army	29	29	29	29	29	5.23
8	Reason for Joining ROTC	1	(a)		0		5.24
9, 13	Factors Related to ROTC and Army Programs	13	5	5	10	7	5.26
B2	Army Branch	1	(a)		(a)		5.27
	TOTAL	219	180	131	181	128	
	% OF APPLICABLE VARIABLES RELATED TO COMMITMENT		72.7%		70.7%		

[a]No statistics were applied to data from these variables.

TABLE 5.10

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS:
DEMOGRAPHIC PROFILE

DEMOGRAPHIC VARIABLES	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship		Relationship with Commitment	Interpretation of Direction of Relationship	
		High Commitment Group	Low Commitment Group		High Commitment Group	Low Commitment Group
Sex	$\chi^2(7)=28.71^{***}$	Male	Female	NA		
Race	$\chi^2(35)=$ NS			$\chi^2(8)=21.88^{**}$	Black	White
Marital Status	$\chi^2(21)=44.94^{**}$	Married; Separated/Divorced	Single; Engaged	$\chi^2(4)=12.26^{*}$	Married; Separated/Divorced	Single; Engaged
Socio-economic Status (range = 1-30)	$r=.06^{*}$	High SES	Low SES	$r=-.11^{**}$	Low SES	High SES
Year in School	$\chi^2(21)=72.23^{***}$	Seniors; Juniors	Freshmen; Sophomores	NA		
Region in Which Grew Up	$\chi^2(63)=$ NS			$\chi^2(40)=$ NS		
Type of Community in Which Grew Up	$\chi^2(28)=$ NS			$\chi^2(16)=30.86^{*}$	Rural; Large City	Suburb
Religion	$\chi^2(28)=46.23^{*}$	Catholic; Protestant	Other	$\chi^2(16)=$ NS		
Age (open range)	$r=.12^{***}$	Older Rs	Younger Rs	$r=$ NS		
Number of Brothers (open range)	$r=$ NS			$r=$ NS		
Number of Sisters (open range)	$r=$ NS			$r=$ NS		
Number of Older Brothers (open range)	$r=-.07^{*}$	Early birth order	Late birth order	$r=$ NS		
Number of Older Sisters (open range)	$r=-.06^{*}$	Early birth order	Late birth order	$r=$ NS		
Number of Children (open range)				$r=.10^{**}$	Many children	Few children
Foreign-born Father	$\chi^2(7)=$ NS			$\chi^2(4)=$ NS		
Foreign-born Mother	$\chi^2(7)=$ NS			$\chi^2(4)=10.10^{*}$	Mother born in U.S.	Mother not born in U.S.

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1-5, unless otherwise indicated. Commitment scores could range from 8-40 for ROTC students, and from 7-35 for Army officers.

For χ^2's, degrees of freedom on which significance was evaluated is given in parenthesis. To compute χ^2's with nominal variables, ROTC student commitment scores were assigned a category score from 1-8; Army officer commitment scores were assigned a category score from 1-5.

* $p < .05$
** $p < .01$
*** $p < .001$

people had higher commitment than single or engaged people. This is probably due to the increased family and financial responsibilities accompanying the married state, which make it more difficult for married people to switch careers, even at the very young stage.

The other significant demographic correlates of ROTC cadet commitment can be gleaned from a quick scan down column 3 of Table 5.10. Highly committed cadets tended to be male ($p < .001$), of high socio-economic status ($p < .01$), in their junior or senior year of college ($p < .001$), and Catholic or Protestant ($p < .05$). They also tended to be older than cadets with low commitment ($p < .001$), and to have fewer older brothers ($p < .05$) or sisters ($p < .05$).

Whereas socio-economic status (SES) was positively related to commitment among cadets, it was negatively related to commitment among Army officers. This finding appears surprising and contradictory, but it seems to complement the previous chapter's finding in which SES was *the* most important discriminating variable between high school cadets and their non-JROTC peers, but no longer discriminated significantly between participants and non-participants at the college and Army officer stages. It may be the case that ROTC initially attracts high SES students but the relationship between SES and participation in/commitment to the path declines as one progresses along the career path. Of course restriction of SES range accompanies progression along the career path (i.e., college students do not vary as much in SES as high school students), so this statistical artifact may also account for the data.

Perusal of column 6 of Table 5.10 gives the other demographic variables significantly related to Army officer career commitment:

(a) Black officers had a higher commitment than White officers ($p < .01$). This finding becomes much more striking when one considers that (as reported in Chapter 4) Whites are overrepresented in the Regular Army and Blacks in the Reserves, and that Regular Army officers have much higher commitment than Reserve officers. Notwithstanding these facts, Black officers are more highly committed than White officers, a finding that probably indicates that Blacks perceive greater opportunities for themselves in the Army than in civilian life, despite their underrepresentation in the Regular Army.

(b) Officers who grew up in rural areas and large cities had higher commitment than officers who grew up in suburban areas ($p < .05$). This finding replicates the previously described results of the analysis of variance of commitment among high school seniors. It suggests that recruitment efforts targe at rural and urban areas will be more successful than recruitment efforts in subu

(c) Officers with many children had higher commitment than officers with few or no children ($p < .01$). As with the finding that married people have higher commitment than single people, this finding is probably due to the pressures to remain in a career one has started, given increased family and financial responsibilities.

(d) Officers whose mothers were born in the U.S. had higher commitment than officers whose mothers were born outside the U.S. ($p < .05$). Location of birth of father or mother was not significantly related to participation or commitment for the high school and college samples so it is difficult to decide how much weight to give to this finding, unless it is replicated in future studies.

Commitment and Military Experience and Attitudes of Family and Friends

Table 5.11 presents the relationship between commitment, and a respondent's military socialization. Length of father's military experience was significantly related to commitment among both the cadet ($p < .001$) and officer ($p < .05$) samples, a finding which supports the career modelling phenomenon discussed in Chapter 4.

Cadets with high commitment also reported greater present contact with military families ($p < .05$), more friends in the military ($p < .05$), and more uncles in the military. Officers with high commitment reported greater contact with military families while growing up ($p < .05$), more friends in the military ($p < .01$), and more cousins in ROTC ($p < .01$) and the military ($p < .01$). Again these findings support the career modelling phenomenon.

Parents' and friends' attitudes towards the military and towards an Army officer career, as perceived and reported by the respondent, were very strongly correlated with respondents' career commitment (all $p < .001$, as Table 5.11 shows). Of interest in this set of results is the finding that at the college career stage, parents' opinions were much more strongly correlated with commitment than friends' opinions. At the officer career stage, the reverse was true. It appears that, during school years, parents have great influence over career plans and intentions; after school years this strong influence gives way to that of peers and friends.

TABLE 5.11

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS:
MILITARY EXPERIENCE AND ATTITUDES
OF FAMILY AND FRIENDS

MILITARY SOCIALIZATION VARIABLES	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship: High Commitment Group	Interpretation of Direction of Relationship: Low Commitment Group	Relationship with Commitment	Interpretation of Direction of Relationship: High Commitment Group	Interpretation of Direction of Relationship: Low Commitment Group
Father's Military Experience						
Father's Military Experience	$\chi^2(56)$= NS			$\chi^2(32)$= NS		
Length of Father's Military Experience	r= .16***	Father in Military Longer		r= .07*	Father in Military Longer	
ROTC and Military Experience of Other Family and Friends						
Siblings in ROTC	$\chi^2(7)$= NS			$\chi^2(4)$= NS		
Cousins in ROTC	$\chi^2(7)$= NS			$\chi^2(4)$=13.77**	Cousin in ROTC	No Cousin in ROTC
Uncles in ROTC	$\chi^2(7)$= NS			$\chi^2(4)$= NS		
Grandparents in ROTC	$\chi^2(7)$= NS			$\chi^2(4)$= NS		
Friends in ROTC	$\chi^2(7)$= NS			$\chi^2(4)$= NS		
Siblings in Military	$\chi^2(7)$= NS			$\chi^2(4)$= NS		
Cousins in Military	$\chi^2(7)$= NS			$\chi^2(4)$=13.51**	Cousin in Military	No Cousin in Military
Uncles in Military	$\chi^2(7)$=14.79*	Uncle in Military	No Uncle in Military	$\chi^2(4)$= NS		
Grandparents in Military	$\chi^2(7)$= NS			$\chi^2(4)$= NS		
Friends in Military	$\chi^2(7)$= 17.01*	Friends in Military	No Friends in Military	$\chi^2(4)$=17.62**	Friends in Military	No Friends in Military
Contact With Military Families						
Contact with Military Families While Growing Up	$\chi^2(7)$= NS			$\chi^2(4)$=10.03*	Yes, Contact	No, No Contact
Present Contact With Military Families	$\chi^2(7)$=14.89*	Present Contact with Military Families	No Present Contact with Military Families	NA		
Parents' and Friends' Military Attitudes						
Friends' Opinion of Military	r= .14***	Friends High Opinion	Friends Low Opinion	r= .32***	Friends High Opinion	Friends Low Opinion
Friends' Rating of Army Officer Career	r= .18***	Friends High Status Rating	Friends Low Status Rating	r= .31***	Friends High Status Rating	Friends Low Status Rating
Parents' Opinion of Military	r= .27***	Parents High Opinion	Parents Low Opinion	r= .19***	Parents High Opinion	Parents Low Opinion
Parents' Rating of Army Officer Career	r= .30***	Parents High Status Rating	Parents Low Status Rating	r= .32***	Parents High Status Rating	Parents Low Status Rating

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1-5, unless otherwise indicated. Commitment scores could range from 8-40 for ROTC students, and from 7-35 for Army officers.

For χ^2's, degrees of freedom on which significance was evaluated is given in parenthesis. To compute χ^2's with nominal variables, ROTC student commitment scores were assigned a category score from 1-8; Army officer commitment scores were assigned a category score from 1-5.

* $p < .05$
** $p < .01$
*** $p < .001$

Commitment and Family Stability

Table 5.12 presents the relationship between family stability -- as measured by number of communities lived in while growing up and separation or divorce between one's parents -- and commitment. Parental separation or divorce was not related to commitment for either the cadet or the officer samples. However, for both samples, it was found that highly committed cadets/officers lived in a greater number of communities while growing up ($p < .001$ and $p < .05$, respectively). As stated previously (in Chapter 4), the latter finding is probably related to presence of a military father, because the correlation between having a military father and frequency of moving was quite high (r ranging from .31 to .48 for the various samples).

Commitment, Aptitudes, and Achievement

The relationship between the grade point average and ability variables and commitment is presented in Table 5.13. Although (as Chapter 4 reported) ROTC students have lower college grades than non-ROTC students, the data in Table 5.13 show that high college grades ($p < .01$) and high reported abilities in social sciences ($p < .01$), mathematics ($p < .05$), and physical education ($p < .05$) are positively related to commitment within the ROTC student group.

The positive relationship may be caused by the scholarship student subgroup within ROTC. This group is high in aptitude and achievement, and also, because of the behavioral Army obligation accompanying their scholarship, high in commitment to ROTC/Army.

Notice how the positive relationship between ability and commitment disappears at the Army officer stage. Highly committed officers report lower high school grades ($p < .001$), lower college grades ($p < .01$) and lower mathematics abilities ($p < .05$) than officers with low commitment. Only in the physical education area was commitment positively related to reported ability ($p < .05$).

These findings supplement the analysis of variance result reported previously that possession of an ROTC scholarship while in college is positively related to commitment among college cadets but not among Army officers.

TABLE 5.12

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS:
FAMILY STABILITY

FAMILY STABILITY VARIABLES	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship		Relationship with Commitment	Interpretation of Direction of Relationship	
		High Commitment Group	Low Commitment Group		High Commitment Group	Low Commitment Group
Number of Communities Lived in While Growing Up (range = 1-3)	r=.15***	Lived in many Communities	Lived in few Communities	$\chi^2(8)$=17.22*	Lived in many Communities	Lived in few Communities
Divorced/Separated Parents	$\chi^2(7)$= NS			$\chi^2(4)$=NS		

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1-5, unless otherwise indicated. Commitment scores could range from 8-40 for ROTC students, and from 7-35 for Army officers.

For χ^2's, degrees of freedom on which significance was evaluated is given in parenthesis. To compute χ^2's with nominal variables, ROTC student commitment scores were assigned a category score from 1-8; Army officer commitment scores were assigned a category score from 1-5.

* $p < .05$
*** $p < .001$

TABLE 5.13

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS:
APTITUDES AND ACHIEVEMENT

APTITUDE AND ACHIEVEMENT VARIABLES	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship		Relationship with Commitment	Interpretation of Direction of Relationship	
		High Commitment Group	Low Commitment Group		High Commitment Group	Low Commitment Group
High School Grade Average	r= NS			r= .15***	Low Grades	High Grades
College Grade Average	r=-.09**	High Grades	Low Grades	r= .09**	Low Grades	High Grades
Self-rated Abilities in:						
Physical Sciences	r= NS			r= NS		
Social Sciences	r=-.09**	High Social Science Abilities	Low Social Science Abilities	r= NS		
Mathematics	r=-.07*	High Mathematics Abilities	Low Mathematics Abilities	r= .07*	Low Mathematics Abilities	High Mathematics Abilities
English	r= NS			r= NS		
Fine Arts	r= NS			r= NS		
Physical Education	r=-.07*	High P.E. Abilities	Low P.E. Abilities	r=-.08*	High P.E. Abilities	Low P.E. Abilities

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1-5, unless otherwise indicated. Commitment scores could range from 8-40 for ROTC students, and from 7-35 for Army officers.

* $p < .05$
** $p < .01$
*** $p < .001$

It appears that some attention may need to be paid to ROTC's recruiting, and especially retaining, cadets and officers of high academic ability.

Commitment and College Major

Table 5.14 presents the relationship between college major, time college major was chosen, and commitment. No relationship was found between college major and commitment for either the cadet or the officer group. However, the time that a choice of major was made was significantly related to the groups' commitment, albeit in an inconsistent manner. Cadets with high commitment made their choice of major later than cadets with low commitment ($p < .01$). Officers with high commitment made their choice of major earlier than officers with low commitment ($p < .001$). No obvious explanation emerges for these discrepant findings, and, since they do not appear to be very important, no attempt was made to explore the other data further for an explanation.

Commitment and Participation in School Extracurricular Activities

The relationship between participation in extracurricular activities and commitment is presented in Table 5.15. Membership in a service-oriented club while in college was positively related to commitment among the cadet ($p < .05$) and officer ($p < .01$) samples. Also, cadets who were JROTC members in high school had higher commitment to ROTC/Army than cadets who only joined ROTC in college ($p < .001$). No other significant relationships were found. It appears from data gathered on this variable cluster that ROTC is not really "just another extracurricular activity" joined by people who participate in many extracurricular activities. Rather, ROTC appears to be truly career exploration on the part of many of its members, a finding that ties in with ROTC students' higher career development scores. (Chapter 4 reported that 30% of college cadets say that a military career is the most likely career for them; 70.2% say it is one of the three most likely careers for them.) The only extracurricular activity which consistently predicts participation in and commitment to ROTC/Army is participation in Junior ROTC while in high school. Again, this finding points to the utility of JROTC programs for recruitment and retention.

TABLE 5.14

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS:
ACTUAL OR INTENDED COLLEGE MAJOR

COLLEGE MAJOR VARIABLES	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship		Relationship with Commitment	Interpretation of Direction of Relationship	
		High Commitment Group	Low Commitment Group		High Commitment Group	Low Commitment Group
College Major When Choice of Major Made (range = 1-8)	$\chi^2(63)$= NS r= .10**	Choice of Major Done Late	Choice of Major Done Early	$\chi^2(36)$= NS r=-.12***	Choice of Major Done Early	Choice of Major Done Late

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1-5, unless otherwise indicated. Commitment scores could range from 8-40 for ROTC students, and from 7-35 for Army Officers.

For χ^2's, degrees of freedom on which significance was evaluated is given in parenthesis. To compute χ^2's with nominal variables, ROTC student commitment scores were assigned a category score from 1-8; Army officer commitment scores were assigned a category score from 1-5.

** $p < .01$
*** $p < .001$

TABLE 5.15

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS:
PARTICIPATION IN SCHOOL EXTRACURRICULAR ACTIVITIES

EXTRACURRICULAR ACTIVITY VARIABLES	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship		Relationship with Commitment	Interpretation of Direction of Relationship	
		High Commitment Group	Low Commitment Group		High Commitment Group	Low Commitment Group
Participation in High School Extracurricular Activities (range= 1-3)	r= NS			r= NS		
Attendance at School With JROTC (range= 1-4)	$\chi^2(7)$= NS			$\chi^2(4)$= NS		
Membership in JROTC in High School (range= 1-4)	$\chi^2(7)$=24.43***	JROTC Member in High School	Not JROTC Member in High School	$\chi^2(4)$= NS		
Membership in College in (range= 1-3):						
A Social Fraternity or Sorority	$\chi^2(14)$= NS			$\chi^2(8)$= NS		
College ROTC	$\chi^2(14)$= NS			$\chi^2(8)$= NS		
A Campus Religious Group	$\chi^2(14)$= NS			$\chi^2(8)$= NS		
A Service-Oriented Club	$\chi^2(14)$=24.36*	Member	Not Member	$\chi^2(8)$=21.02**	Member	Not Member
A Campus Political Party	$\chi^2(14)$= NS			$\chi^2(8)$= NS		
A Professional Society	$\chi^2(14)$= NS			$\chi^2(8)$= NS		
Student Government	$\chi^2(14)$= NS			$\chi^2(8)$= NS		
Athletic Team	$\chi^2(14)$= NS			$\chi^2(8)$= NS		

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1-5, unless otherwise indicated. Commitment scores could range from 8-40 for ROTC students, and from 7-35 for Army officers.

For χ^2's, degrees of freedom on which significance was evaluated is given in parenthesis. To compute χ^2's with nominal variables, ROTC student commitment scores were assigned a category score from 1-8; Army officer commitment scores were assigned a category score from 1-5.

* $p < .05$
** $p < .01$
*** $p < .001$

Personal Values and Commitment

In Chapter 4 the values which best discriminated ROTC students from non-ROTC students were: leadership, patriotism, conformity, acceptance of authority, and recognition (all held more deeply by ROTC students); and aestheticism, benevolence, religiousness, independence, and support (all held more deeply by non-ROTC students). The same values discriminated between members of the Regular Army and Active Duty Reservists, with Regular Army members' value profile corresponding to that of ROTC students and Active Duty Reservists' profile corresponding to that of non-ROTC students. The only exception to this was the conformity value, which was more important to both the ROTC students and the Active Duty Reservists.

In keeping with the major theme of this chapter, the value items were reanalyzed for their ability to predict commitment within the ROTC cadet and Army officer groups already on the ROTC/Army career path.

Table 5.16 presents the mean commitment of the cadets and officers choosing each value as the most important among the 14 values in the list. Note that this table is based on only one item -- *most important* personal value, and is therefore not directly comparable with data presented in Table 4.8 and Figure 4.1, both of which were based on six items (three most important and three least important values).

There are two pieces of information obtainable from Table 5.16. The first is *popularity* of the value, as gleaned from the number of cadets and officers in the sample choosing the value as being the most important to them. The most popular values among cadets were, in descending order of importance, independence, support, and religiousness. The most important values among officers were independence, pragmaticism, and intellectualism.

More apropos to the issue at hand is: How do these value choices relate to cadets' and officers' commitment to remaining in ROTC/Army? The answer to this question is given in the columns titled Mean Commitment (of all cadets and officers who chose the value as being most important; in the table, the 14 values are presented according to decreasing commitment among officers choosing the value as most important). A result pattern similar to that reported in Chapter 4 was obtained. Officers and cadets choosing *patriotism* and *leadership* as most important to them had the highest

TABLE 5.16
CORRELATES OF ROTC/ARMY COMMITMENT
AMONG ROTC STUDENTS AND ARMY OFFICERS:
MOST IMPORTANT PERSONAL VALUE

PERSONAL VALUE VARIABLES	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	n	MEAN COMMITMENT	STANDARD DEVIATION	n	MEAN COMMITMENT	STANDARD DEVIATION
Patriotism	32	34.56	5.89	32	25.55	6.30
Leadership	55	34.43	4.11	56	25.26	7.21
Equalitarianism	51	31.24	7.04	51	23.04	6.86
Acceptance of Authority	10	31.96	7.10	8	23.00	7.09
Support	94	30.25	5.63	56	22.40	7.94
Pragmaticism	45	29.81	6.58	73	20.92	8.40
Recognition	52	31.88	5.84	46	20.34	7.01
Need for Uniqueness	18	30.16	7.88	9	20.00	8.34
Religiousness	72	29.36	6.68	54	19.62	7.87
Benevolence	61	30.38	7.16	35	19.35	8.16
Intellectualism	53	30.37	6.24	66	18.78	8.13
Independence	153	28.53	6.61	122	16.70	7.22
Aestheticism	7	26.69	5.84	8	15.00	7.01
Conformity	8	32.30	7.70	0	-	-
Total Group	711	30.50	6.01	616	20.35	8.00

Note. The ROTC student commitment scores were based on eight items and could range from 8 - 40; the Army officer scores were based on seven items and could range from 7 - 35. Thus the mean commitment scores of the two groups are not directly comparable.

$r_s = .79$, $p < .001$

commitment; officers and cadets choosing *aestheticism* and *independence* as most important to them had the lowest commitment. The Spearman rank order correlation coefficient computed on the commitment ranks for cadets and officers was highly significant ($r_s = .79$, $p < .001$), meaning that, for both groups, values related to commitment in the same way.

The fact that independence, by far the most popular value, was strongly correlated to commitment in a *negative* manner, has implications the Army may wish to think about. Independence is obviously a strong, predominant American value. It was the first choice not only of the two respondent groups scrutinized in the present chapter (college cadets and officers), but also of three of the four other respondent groups studied (all except the high school JROTC group). Yet independence appears to be negatively related to both participation in and commitment to the ROTC/Army career path. Are military life and independence, defined in the present study as "being free to make one's own decisions ..." inherently contradictory? If not, how can components of the Army be changed to be more responsive to this strongly held American value? Data from the present study indicate that such changes would attract a wider range of individuals into the Army officer corps.[5]

First Career Most Likely and Commitment

Table 5.17 presents the relationship between cadets' and officers' first career most likely and their commitment to ROTC/Army. As with Table 5.16, the career groups are presented in order of decreasing commitment among the Army officer sample. Two pieces of information are obtainable from Table 5.17: (a) the number of cadets and officers choosing each career group as the most likely for them; and (b) the mean commitment of cadets and officers choosing each career group.

Not surprisingly, for both cadets and officers, a military officer career was chosen more than any other one as first career most likely. In addition, cadets and officers choosing such military officer career had by far the highest commitment to the career path (almost by definition, since the career commitment scale supposedly measures intentions to remain in the military career path).

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[5]Other studies have come to this same conclusion, *c.f.* the work of Goodstadt and Glickman on the salience of fate control to retention in the armed services; also the work of O'Toole *et al.*, 1973, on the fact that American youth are concerned with commitment to meaningful careers and hard work, but are less willing to submit to authoritarian leadership in work settings.

TABLE 5.17

CORRELATES OF ROTC/ARMY COMMITMENT

AMONG ROTC STUDENTS AND ARMY OFFICERS:

FIRST CAREER BEING CONSIDERED

FIRST CAREER BEING CONSIDERED	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	n	MEAN COMMITMENT	STANDARD DEVIATION	n	MEAN COMMITMENT	STANDARD DEVIATION
Military Officer	226	35.23	4.04	175	28.81	4.20
Construction Trades	4	32.00	3.73	2	21.00	8.49
General Labor, Community of Public Service	8	27.50	6.35	5	19.00	9.98
General Teaching and Social Service	40	28.93	6.09	49	19.00	7.47
Medical and Biological Sciences	90	29.41	6.08	34	18.84	6.48
Fine Arts, Performing Arts	17	26.32	8.28	5	17.83	5.69
Humanities, Law, Social and Behavioral Sciences	135	28.45	6.31	104	17.21	6.77
Business Administration	97	28.26	6.18	131	17.21	6.30
Technical Jobs	11	26.59	8.75	7	16.86	4.30
Engineering, Physical Science, Mathematics, Architecture	78	29.21	6.26	89	16.83	7.32
Mechanics, Industrial Trades	6	29.29	5.53	2	15.50	2.12
Other	30	27.80	6.99	17	14.68	5.30
Proprietors, Sales	4	21.64	4.72	14	13.64	5.35
Secretarial/Clerical	3	19.52	6.24	0	-	-
Housewife	4	27.65	2.33	0	-	-
Total Group	753	30.52	6.55	634	20.46	8.02

Note. The ROTC student commitment scores were based on eight items and could range from 8 - 40; the Army officer scores were based on seven items and could range from 7 - 35. Thus the mean commitment scores of the two groups are not directly comparable.

$r_s = .52$, $p < .05$

There did not appear to be any other strong consistent relationships between first career most likely and commitment. The Spearman rank order correlation between the cadet and officer commitment ranks was moderately significant (r_s = .52, p < .05); for both groups the construction trades people had high commitment, the proprietors and sales people had low commitment.

One final tangential point of interest in the data presented in Table 5.17 is that, for the officer group, business administration was the second most popular career cluster, after that of military officer. As stated in Chapter 4, 12 of the 15 clusters studied (all except military officer, housewife, and "other") were derived empirically from Project TALENT longitudinal data showing that people going into a cluster tended to share abilities and interests. In the TALENT clustering, a military officer career fell *within the business administration cluster*, a fact which present data appear to support. Of the 634 officers in the study 28% intend to remain as officers; 21% intend to enter the "similar" field of business administration.

Interests and Aspirations and Commitment

Table 5.18 presents the interest and aspiration variables and their relationship to commitment for the cadet and officer samples. For both groups, commitment was positively correlated with high physical education interests and high educational aspirations. In addition, for the cadet group, commitment was positively correlated with high physical science interests (p < .01), high social science interests (p < .01), and high mathematics interests (p < .01). These findings generally complement ones reported in Chapter 4 about the variables' relationship to participation in ROTC (cadets were found to have higher educational aspirations, and higher expressed interest in physical and social science than non-ROTC students).

For the Army officer group two additional findings were obtained which also complement ones reported in Chapter 4: (a) career, as opposed to family, salience was positively related to commitment (p < .001); and (b) salary expectations were *negatively* related to commitment (p < .001; recall from Chapter 4 that members of the Regular Army had *lower* salary expectations than members of the Active Duty Reserve).

TABLE 5.18

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS: INTERESTS AND ASPIRATIONS

INTEREST AND ASPIRATION VARIABLES	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship		Relationship with Commitment	Interpretation of Direction of Relationship	
		High Commitment Group	Low Commitment Group		High Commitment Group	Low Commitment Group
Self-rated Interests in: Physical Sciences	r=-.09**	High Physical Science Interests	Low Physical Science Interests	r= NS		
Social Sciences	r=-.09**	High Social Science Interests	Low Social Science Interests	r= NS		
Mathematics	r=-.09**	High Mathematics Interests	Low Mathematics Interests	r= NS		
English	r= NS			r= NS		
Fine Arts	r= NS			r= NS		
Physical Education	r=-.10**	High P.E. Interests	Low P.E. Interests	r=-.08*	High P.E. Interests	Low P.E. Interests
Highest Educational Level Aspired For	r= .12***	High Educational Aspirations	Low Educational Aspirations	r= .08*	High Educational Aspirations	Low Educational Aspirations
Salary Expectations for Fifteen Years Out of High School	r= NS			r=-.17***	Low Salary Expectations	High Salary Expectations
Career vs. Family Salience	r= NS			r=-.20***	Career more Salient	Family more Salient
Industrial vs. Occupational Commitment	r= NS			r= NS		

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1-5, unless otherwise indicated. Commitment scores could range from 8-40 for ROTC students, and from 7-35 for Army officers.

* $p < .05$
** $p < .01$
*** $p < .001$

It appears that a high salary is not one of the Army officer job's greatest attractions. On the other hand, the data do not really show salary to be a potent dissatisfier, either. What the data appear to be saying is that one can expect an "average" salary from an Army officer job. Some people are content with an average salary; others expect more and intend to seek out fulfillment of these expectations in civilian life.

Job Dimensions of Importance and Commitment

Table 5.19 gives the relationship between importance ratings attached by cadets and officers to the 21 job dimensions studied, and their commitment to a ROTC/Army career. Because importance ratings were scored with a low score (1) reflecting high importance and a high score (5) reflecting low importance, negative correlations in Table 5.19 mean that the job dimension's importance is positively related to commitment.

Of greatest interest in Table 5.19 are those dimensions for which a low importance rating accompanied high commitment. These dimensions were: geographic desirability, personal freedom (for both cadets and officers), salary (for cadets), and utilization of skills and stability of home life (for officers). These findings are not surprising when one considers that four of these five dimensions -- all except salary -- are ones found wanting in an Army career (see Figure 4.2 in Chapter 4). It is as though the highly committed officers and cadets are saying: "the Army does not really satisfy on these dimensions, but they are not too important to me, personally, so I can continue serving."

The dimensions for which high importance ratings correlated with high commitment most strongly ($p < .001$ for both cadets and officers) were: responsibility, more schooling, chance to be a leader and adventure. Responsibility, chance to be a leader and adventure were the dimensions on which an Army officer career was rated most highly (again see Figure 4.2 in Chapter 4), so once again the findings dovetail: people who value dimensions which the Army satisfies will stay on.

TABLE 5.19

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS:
IMPORTANCE RATINGS ATTACHED TO 21 JOB DIMENSIONS

JOB DIMENSIONS	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship		Relationship with Commitment	Interpretation of Direction of Relationship	
		High Commitment Group	Low Commitment Group		High Commitment Group	Low Commitment Group
Salary	r = .07*	Low importance	High importance	r = NS		
Prestige	r = NS			r = -.16***	High importance	Low importance
Responsibility	r = -.12***	High importance	Low importance	r = -.14***	High importance	Low importance
Interesting People	r = -.07*	High importance	Low importance	r = NS		
Utilization of Skills	r = NS			r = .12**	Low importance	High importance
Contribution to Society	r = NS			r = NS		
Geographic Desirability	r = .06*	Low importance	High importance	r = .22***	Low importance	High importance
More Schooling	r = -.18***	High importance	Low importance	r = -.16***	High importance	Low importance
Stability of Home Life	r = NS			r = .21***	Low importance	High importance
Chance to be Leader	r = -.21***	High importance	Low importance	r = -.27***	High importance	Low importance
Personal Freedom	r = .08*	Low importance	High importance	r = .11**	Low importance	High importance
Adventure	r = -.15***	High importance	Low importance	r = -.30***	High importance	Low importance
Job Security	r = NS			r = -.21***	High importance	Low importance
Chance to Help Others	r = -.06*	High importance	Low importance	r = -.10**	High importance	Low importance
Self-Improvement	r = -.08*	High importance	Low importance	r = NS		
Quality of Supervisors	r = NS			r = NS		
Interesting/Challenging Job	r = NS			r = NS		
Feedback on Performance	r = -.14***	High importance	Low importance	r = -.09**	High importance	Low importance
Importance of Work	r = -.08*	High importance	Low importance	r = -.12**	High importance	Low importance
Family Contentment	r = NS			r = NS		
Advancement Opportunity	r = -.13***	High importance	Low importance	r = -.11**	High importance	Low importance

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1 (high importance) to 5 (low importance). Commitment scores could range from 8 - 40 for ROTC students, and from 7 - 35 for Army Officers.

* $p < .05$
** $p < .01$
*** $p < .001$

Satisfaction on Job Dimensions and Commitment

Table 5.20 presents the correlations between satisfaction ratings assigned to an Army officer job on the 21 job dimensions and commitment. Satisfaction ratings were scored in a counterintuitive manner, with a low rating (1) expressing high satisfaction and a high rating (5) expressing low satisfaction. Hence, all negative correlations in the table indicate a positive relationship between satisfaction and commitment.

As expected, satisfaction on each dimension was positively related to commitment to remaining in the career path. Probably of greatest interest in the data given in Table 5.20 is the fact that all 21 correlations for Army officers were higher than the corresponding correlations for ROTC students. This is undoubtedly due to the greater certainty attached to the officer ratings, which are based on actual experiences in the Army, instead of expectations.

For cadets, the dimensions for which expected satisfaction correlated most highly with commitment were (in descending order of correlation magnitude): chance to be a leader, adventure, responsibility, and self-improvement. Expected satisfaction on all these dimensions correlated $\geq .25$ with commitment. For officers, the dimensions for which actual satisfaction correlated most highly with commitment were (again in descending order of correlation magnitude): interesting/challenging job, contribution to society, and self-improvement. Satisfaction on all these dimensions correlated $>.40$ with commitment.

The Socio-Psychological and Information Scales and Commitment

The relationship between scores on the socio-psychological and information scales and commitment is presented in Table 5.21. The scales proved to be potent correlates not only of participation in the ROTC/Army career path (as Chapter 4 demonstrated), but also of commitment to the path among ROTC cadets and Army officers.

Consistent with the hypotheses of the study presented in Chapter 1 and consistent with the findings regarding the scales' ability to discriminate

TABLE 5.20

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS:
ARMY JOB SATISFACTION RATINGS ASSIGNED TO 21 JOB DIMENSIONS

JOB DIMENSIONS	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship		Relationship with Commitment	Interpretation of Direction of Relationship	
		High Commitment Group	Low Commitment Group		High Commitment Group	Low Commitment Group
Salary	r=-.06*	High Satisfaction	Low Satisfaction	r=-.12***	High Satisfaction	Low Satisfaction
Prestige	r=-.20***	"	"	r=-.36***	"	"
Responsibility	r=-.25***	"	"	r=-.35***	"	"
Interesting People	r=-.20***	"	"	r=-.36***	"	"
Utilization of Skills	r=-.12***	"	"	r=-.33***	"	"
Contribution to Society	r=-.19***	"	"	r=-.43***	"	"
Geographic Desirability	r=-.10**	"	"	r=-.23***	"	"
More Schooling	r=-.22***	"	"	r=-.29***	"	"
Stability of Homelife	r=-.08*	"	"	r=-.34***	"	"
Chance to be a Leader	r=-.30***	"	"	r=-.34***	"	"
Personal Freedom	r=-.07*	"	"	r=-.33***	"	"
Adventure	r=-.26***	"	"	r=-.32***	"	"
Job Security	r=-.08*	"	"	r=-.13***	"	"
Chance to Help Others	r=-.17***	"	"	r=-.32***	"	"
Self-Improvement	r=-.25***	"	"	r=-.42***	"	"
Quality of Supervisors	r=-.15***	"	"	r=-.29***	"	"
Interesting/Challenging Job	r=-.23***	"	"	r=-.49***	"	"
Feedback on Performance	r=-.19***	"	"	r=-.28***	"	"
Importance of Work	r=-.17***	"	"	r=-.31***	"	"
Family Contentment	r=-.12***	"	"	r=-.37***	"	"
Advancement Opportunity	r=-.18***	"	"	r=-.38***	"	"

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1 (high satisfaction) to 5 (low satisfaction). Commitment scores could range from 8-40 for ROTC students, and from 7-35 for Army officers.

* $p < .05$
** $p < .01$
*** $p < .001$

TABLE 5.21

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS:
THE SOCIO-PSYCHOLOGICAL AND INFORMATION SCALES

SOCIO-PSYCHOLOGICAL AND INFORMATION SCALE VARIABLES	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship		Relationship with Commitment	Interpretation of Direction of Relationship	
		High Commitment Group	Low Commitment Group		High Commitment Group	Low Commitment Group
Socio-psychological Scales						
Beliefs about ROTC (range = 26-130)	r= .35***	Favorable Beliefs About ROTC	Unfavorable Beliefs About ROTC	r= .33***	Favorable Beliefs About ROTC	Unfavorable Beliefs About ROTC
Beliefs About the Army (range = 28-140)	r= .52***	Favorable Beliefs about the Army	Unfavorable Beliefs about the Army	r= .55***	Favorable Beliefs about the Army	Unfavorable Beliefs about the Army
Subscription to Military Ideology (range = 9-45)	r= .31***	High Subscription to Military Ideology	Low Subscription to Military Ideology	r= .44***	High Subscription to Military Ideology	Low Subscription to Military Ideology
Bureaucratic Tendencies (range = 9-45)	r= NS			r= .34***	High Bureaucratic Tendencies	Low Bureaucratic Tendencies
Need for Fate Control (range = 6-30)	r=-.15***	Low Need for Fate Control	High Need for Fate Control	r= NS		
Anomy (range = 5-25)	r=-.16***	Low Anomy	High Anomy	r=-.08*	Low Anomy	High Anomy
Career Development, Exploration Stage (range = 12-60)	r= .15***	Greater Career Development	Low Career Development	r= .09**	Greater Career Development	Low Career Development
Career Development, Establishment Stage (range = 12-60)	r= .17***	Greater Career Development	Low Career Development	r= .32***	Greater Career Development	Low Career Development
Political Position						
Political Position[a]	r= .09*	Conservative Politics	Liberal Politics	r= .07*	Conservative Politics	Liberal Politics
ROTC and Army Information Tests						
ROTC Information (range = 7-14)	r= .22***	More Accurate Information About ROTC	Less Accurate Information About ROTC	NA		
Army Information (range = 7-14)	r= .24***	More Accurate Information About the Army	Less Accurate Information About the Army	NA		

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1-5, unless otherwise indicated. Commitment scores could range from 8-40 for ROTC students, and from 7-35 for Army officers.

[a] Unlike the rest of the variables in this table, political position was measured by means of a single item, and not by means of a group of scale items.

* $p < .05$
** $p < .01$
*** $p < .001$

members of the career path from non-members (presented in Chapter 4), it was found that ROTC/Army career commitment was positively related to: favorable beliefs about ROTC ($p < .001$ for cadets and officers), favorable beliefs about the Army ($p < .001$ for cadets and officers), high subscription to military ideology ($p < .001$ for cadets and officers), high bureaucratic tendencies ($p < .001$ for officers), low need for fate control ($p < .001$ for cadets), low anomy ($p < .001$ for cadets; $p < .05$ for officers), greater career development ($p < .001$ for cadets and officers), conservative politics ($p < .05$ for cadets and officers), and more accurate information about ROTC and the Army ($p < .001$ for cadets; officers were not given the information tests).

Indeed these scale dimensions, in conjunction with the previously described value items and job importance items, appear to make-up a strikingly clear and consistent "military personality" picture of ROTC cadets and Army officers.

Beliefs About ROTC and the Army and Commitment

Tables 5.22 and 5.23 present the correlations between each of the 26 beliefs about ROTC and the 28 beliefs about the Army and commitment among ROTC cadets and Army officers. As expected, favorable beliefs were almost universally associated with high commitment.

A factor analysis of these beliefs, and the relationship of the obtained factors to commitment is described in detail in Chapter 8; thus, the present discussion will be very brief and limited only to the following most salient points:

1. Beliefs about the Army correlated more strongly with commitment to ROTC/Army than did beliefs about ROTC. The median correlation between the beliefs about ROTC items and commitment was .17 for both cadets and officers. The median correlation between the beliefs about the Army items and commitment was .23 for cadets and .28 for officers. (Recall from Chapter 4 that the beliefs about the Army items likewise did a better job of discriminating participants from non-participants than did the beliefs about ROTC items.)

2. As with the Army job satisfaction ratings discussed in the previous section, higher correlations between beliefs about the Army and commitment

TABLE 5.22

BELIEFS ABOUT ROTC AND COMMITMENT

	BELIEFS ABOUT ROTC	RE-CODE? (a)	r WITH COMMITMENT, COLLEGE ROTC SAMPLE	r WITH COMMITMENT ARMY SAMPLE
AA01.	ROTC helps students develop self-discipline of mind and body.	•	.21***	.19***
AA02.	Cadets have a poor image among some people.		-.09**	.11**
AA03.	ROTC is excellent training for an Army officer position.	•	.08*	.16***
AA04.	ROTC cadets are easy to get along with.	•	.16***	.12**
AA05.	Military service helps one fufill a patriotic duty.	•	.19***	.26***
AA06.	Someone close to me (girlfriend/boyfriend, spouse, parent) does not (would not) like my being in ROTC.		.17***	.09*
AA07.	ROTC provides challenges for the individual.	•	.24***	.26***
AA08.	ROTC instructors are easy to get along with.	•	.17***	.09**
AA09.	Joining ROTC satisfies (would satisfy) the desires of my parents and/or other relatives.	•	.11***	NS
AA10.	Drill is not relevant to being a good officer.		.19***	.24***
AA11.	Being a member of ROTC is a great way to earn money while going to college.	•	.17***	NS
AA12	Joining ROTC helps one postpone decisions about what to do after college.	•	-.10**	-.16***
AA13.	ROTC instructors are competent.	•	.22***	.17***
AA14.	ROTC helps one get a better civilian job than one could otherwise obtain.	•	.24***	.10**
AA15.	ROTC leads to a military commitment that is too long.		.34***	.29***
AA16.	ROTC helps students develop an awareness of personal goals and values.	•	.28***	.23***
AA17.	The ROTC curriculum/materials are of good quality.	•	.19***	.27***
AA18.	ROTC requires too much time while in school.		.16***	.18***
AA19.	ROTC helps one develop job-related skills and interests.	•	.13***	.29***
AA20.	ROTC provides a means for having a good time before settling down.	•	.13***	NS
AA21.	ROTC involves too much mickey-mouse and too many irrelevant details.		.20***	.33***
AA22.	ROTC helps students gain experience and ability as a leader.	•	.26***	.22***
AA23.	ROTC cadets are competent.	•	.15***	.14***
AA24.	Joining ROTC is a good way to have a job guaranteed upon graduation.	•	NS	-.11**
AA25.	Discipline is overemphasized in ROTC.		.27***	.21***
AA26.	ROTC provides an accurate picture of Army life.	•	NS	.10**

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1 - 5; commitment scores could range from 8 - 40 for ROTC students, and from 7 - 35 for Army officers.

[a]Items with a • have been recoded so that, for all items, a 5 reflects a favorable evaluation of ROTC, and a 1 an unfavorable evaluation. Thus, for all items in the table, a positive correlation indicates that a favorable belief accompanies high commitment to ROTC/Army.

* $p < .05$
** $p < .01$
*** $p < .001$

TABLE 5.23
BELIEFS ABOUT THE ARMY AND COMMITMENT

	BELIEFS ABOUT THE ARMY	RE-CODE? (a)	r WITH COMMITMENT, COLLEGE ROTC SAMPLE	r WITH COMMITMENT ARMY SAMPLE
AA01.	The Army does not give its people enough freedom in their personal lives.		.24***	.36***
AA02.	The training one gets in the Army is useful in civilian life.	●	.23***	.29***
AA03.	Discipline is inconsistently applied in the Army.		.12***	.12**
AA04.	Living arrangements are better in the Army than in civilian life.	●	.12***	.33***
AA05.	The Army helps give many people a sense of direction.	●	.16***	.27***
AA06.	Army people contribute to their country more than civilians.	●	.09**	.29***
AA07.	I am not interested in military life for myself.		.65***	.79***
AA08.	I am impressed by the quality of officers in the Army.	●	.26***	.34***
AA09.	The Army helps its people develop self-discipline of mind and body.	●	.23***	.33***
AA10.	One encounters greater prejudice in the Army than in civilian life.		.16***	.16***
AA11.	It is hard to make really good friends in the Army.		.22***	.28***
AA12.	The fringe benefits of an Army job are hard to beat in civilian jobs.	●	.26***	.12***
AA13.	Because of constant mobility, it is hard to lead a normal family life in the Army.		.25***	.39***
AA14.	The Army officer is held in high respect by the general public.	●	.07*	.18***
AA15.	The opportunity to travel is one of the rewarding aspects of Army Life.	●	.23***	.28***
AA16.	Discipline is overemphasized in the Army.		.29***	.28***
AA17.	The Army officer is held in high respect by the majority of my friends.	●	.23***	.33***
AA18.	Army officers typically get along well with their supervisors.	●	.17***	.21***
AA19.	It is hard to get satisfactory privacy in the Army.		.21***	.28***
AA20.	One can have a rewarding social life on an Army base.	●	.34***	.37***
AA21.	There is something immoral about being part of the military.		.27***	.27***
AA22.	Recreation and entertainment are better in the Army than in civilian life.	●	.26***	.30***
AA23.	It is hard to take orders from supervisors.		.27***	.26***
AA24.	In general, people in the Army do more for their country than civilians.	●	.13***	.21***
AA25.	The Army does not give its people enough freedom on the job.		.23***	.29***
AA26.	In the Army everyone must be alike.		.25***	.25***
AA27.	Army officers' only contact with their subordinates is giving them orders.		.29***	.16***
AA28.	Close friendships are not made easily in the Army.		.23***	.29***

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1 - 5. Commitment scores could range from 8 - 40 for ROTC students, and from 7 - 35 for Army officers.

[a]Items with a ● have been recoded so that, for all items, a 5 reflects a favorable evaluation of the Army, and a 1 an unfavorable evaluation. Thus, for all items in the table, a positive correlation indicates that a favorable belief accompanies high commitment to ROTC/Army.

*$p < .05$, **$p < .01$, ***$p < .001$

were obtained for the officer than for the cadet sample. As stated previously, this finding is attributable to the greater experience-base on which the officer ratings are based. Officers are surer about what is in store for them if they remain in the Army; thus, their ratings of the Army determine more strongly their intention to remain in the career path.

3. For the most part, the items which were negatively or insignificantly related to commitment among the beliefs about ROTC items had to do with utilization of ROTC as a vehicle for attainment of ends other than an Army commission, to wit: "Joining ROTC satisfied the desires of my parents and/or other relatives;""Being a member of ROTC is a great way to earn money while in college;" "ROTC provides means for having a good time before settling down" (all not significantly related to commitment for the officer group); "Joining ROTC helps postpone decisions about what to do after college;" and "Joining ROTC is a good way to have a job guaranteed after graduation" (both not significantly or negatively related to commitment for the cadet as well as officer groups).

Respondents who agreed that ROTC satisfies these (admittedly positive) instrumental ends did not tend to be high in commitment, presumably because they joined ROTC for the said instrumental ends rather than to truly explore a military career. Data to be examined in the next section regarding the relationship between reasons for joining ROTC and commitment will support this explanation of the data.

Further support is found in the fact that the ROTC belief item with the *highest* mean correlation with commitment for the cadet and officer groups was "ROTC leads to a military commitment that is too long." Highly committed cadets and officers *disagreed strongly* with this statement, presumably because for one truly exploring a career, a two to four year obligated service stint is not a long period. For one with low commitment, who joined ROTC for other instrumental benefits (to satisfy parents, to earn money in college, to have a good time, to have a guaranteed job after graduation, to postpone decisions about what to do after college), two to four years may seem like a high price to pay. In the words of one respondent, the obligated duty tour for such a person becomes a "stiff sentence."

Reason for Joining ROTC and Commitment to ROTC/Army

So far the discussion has centered on correlates of commitment among variables introduced and described in the previous chapter. The next sets of variables to be discussed were not touched on in Chapter 4, because the items were asked only of ROTC cadets and Army officers, and not of the three other groups studied in Chapter 4 (high school JROTC and non-JROTC seniors; college non-ROTC students).

These variable sets are: (a) reason for joining ROTC; (b) factors related to the ROTC and Army programs; and (c) Army branch.

ROTC cadets were asked "Why did you join ROTC.... What was the most important influence on you? The second most important influence on you? The third most important influence on you?" They were asked to answer the questions using the 14 response categories given in column 1 of Table 5.24. The response categories were derived from preliminary interviews with 75 ROTC cadets and 60 Army officers prior to construction of the survey questionnaire.

Columns 2, 3, and 4 of Table 5.24 give the number of cadets citing each reason as most influential, second most influential, and third most influential in their decision to join ROTC. Column 2 indicates that there were three predominant major reasons for joining ROTC: (a) to receive an Army commission; (b) because of the financial benefits offered by ROTC; and (c) to satisfy parental desires.

Column 5 gives the mean commitment of the group of cadets citing each of the 14 influences as "most important." The influences are sequenced in order of decreasing commitment attached to each of them. There was a strong relationship between motivation for joining ROTC and commitment. The cadets who had by far the highest commitment were those who joined ROTC to receive an Army commission. These cadets had a mean commitment score of 35.69 (out of a possible 40); the standard deviation of their scores (3.90) was lower than the standard deviation for any other group.

Compare the mean of this Army commission-motivated group with the mean of the group with the lowest commitment, those who joined ROTC because it was an easy elective/extracurricular activity. The mean commitment score of the latter group was only 23.08, two standard deviations below the mean of the Army commission group! Indeed, initial reason for joining ROTC is a strong determinant of eventual commitment to ROTC/Army.

TABLE 5.24

THE RELATIONSHIP BETWEEN MAJOR REASON FOR JOINING ROTC AND SUBSEQUENT COMMITMENT TO ROTC/ARMY

IMPORTANT INFLUENCES IN DECISION TO JOIN ROTC	NUMBER OF CADETS CITING THIS REASON AS			MEAN COMMITMENT OF THE GROUP OF CADETS CITING REASON AS "MOST INFLUENTIAL"	S.D., COMMITMENT
	MOST INFLUENTIAL	SECOND MOST INFLUENTIAL	THIRD MOST INFLUENTIAL		
Army Commission	130	73	60	35.69	3.90
Patriotism	28	33	67	33.62	4.96
Job Security after graduation	51	101	128	32.91	4.12
Brothers/Sisters	24	30	12	32.05	4.80
Training Opportunities	56	93	83	30.92	5.31
Financial Benefits	122	113	99	30.44	4.75
Parents	109	84	43	30.40	6.54
Adventure	31	48	84	28.69	6.55
Other Relatives	20	26	23	27.87	6.80
Learn Military History	33	37	47	27.17	7.06
Counselors	17	24	13	27.05	6.14
Friends	52	48	33	26.61	7.03
Other[a]	48	10	21	26.36	7.21
Easy Elective/Extra curricular activity	29	29	34	23.08	7.35
Total Group	750	749	747	30.55	6.53

Note. Commitment scores were based on eight items and could range from 8 - 40. This item was unfortunately not asked of the Army officer sample.

[a]Respondents citing this category were asked to specify the particular influence which led them to join ROTC. Most of them mentioned "the draft".

Because the influences are ordered in terms of decreasing commitment, a quick scan down column 1 of Table 5.24 reveals the "good" reasons for joining ROTC (in terms of subsequent commitment to the career path) as well as the "bad" reasons. The best reasons for joining ROTC are: to receive an Army commission, to exhibit patriotism, to acquire future job security, and to follow the footsteps of older brothers/sisters in ROTC. The worst reasons are: to enroll in an easy elective; "other" (cadets giving this response category were asked to specify the specific reason; most of them said "because of the draft"); and to join good friends in ROTC. Notice that the good reasons involve actual career exploration; the bad reasons involve mainly avoidance or social motivations.

This motivation for joining ROTC item provides valuable information for ROTC recruitment advertising. During "lean" years, or years when the Army wants to increase the sheer volume of enrollment, recruitment efforts should stress the *popular* reasons for joining: an Army commission, the financial benefits accompanying ROTC, the satisfaction or pride it would give one's parents. However, during years where potential enrollment figures appear to be sufficient or even in surplus, recruitment efforts should stress the *good* reasons for joining, good in terms of subsequent retention (note: ideally, "good" would mean in terms of subsequent *retention* as well as quality *performance*; however, the present study focussed only on commitment and not on performance evaluation). Thus, during years when there are sufficient numbers wanting to join ROTC, the Army could stress in its recruitment advertising the opportunity for true career exploration and preparation offered by ROTC as well as the job security and possible Army commission awaiting one after graduation.

Factors Related to the ROTC and Army Programs and Commitment

ROTC college cadets were asked five questions related to their ROTC program: (a) Do you have an ROTC scholarship? (b) What average grade have you gotten in your ROTC courses? (c) When did you decide to join ROTC? (d) How satisfied are you with your performance in the ROTC program? and (e) Would you have joined ROTC if it did not offer any financial benefits? They were also asked which branch of the Army they intended to join.

Army officers were asked four questions related to their former ROTC program: (a) Did you have an ROTC scholarship? (b) What average grade did you get in your ROTC courses? (c) How satisfied were you with the ROTC program you attended? (d) How relevant was the ROTC program to your Army job? They were also asked seven questions related to their present Army program: (a) How many months elapsed between the end of college and the beginning of your Army Basic Training? (b) Which branch of the Army are you in now? (c) Was this branch your first choice? (d) How attached to the Army did you feel your first week at Basic Course? (e) How satisfied are you with your Army job? (f) How satisfied are you with your performance thus far in the Army? and (g) After college would you have joined the Army if you did not have any contractual obligations?

The Army branch item is treated separately in the next section for both ROTC cadets and Army officers. The relationship between the other items and commitment is given in Table 5.26. Because Chapter 4 did not deal with these items, the distribution of responses to the items has not yet been presented. The interested reader is referred to Table 5.25 for this distribution.

Table 5.26 indicates that, as previously mentioned under the analysis of variance section, possession of an ROTC scholarship was positively correlated with commitment among cadets ($p < .001$) but not among officers. Good performance in ROTC -- as measured by grade point average in ROTC courses, and personal satisfaction with performance in ROTC -- was consistently related to high commitment. Cadets who decided to join ROTC early -- in high school or early college -- had higher commitment than the late-joiners ($p < .001$). Cadets who would have joined ROTC even if it did not offer any financial benefits had higher commitment than cadets who were motivated by financial benefits ($p < .001$).

As for the Army officers' group, highly committed officers were satisfied with the ROTC program they attended ($p < .001$), thought their ROTC program was relevant to their present Army job ($p < .001$), felt attached to the Army as early as during their Basic Course ($p < .001$), were currently satisfied with their Army job and their personal job performance in the Army (both $p < .001$), and would have joined the Army after college even if their ROTC contract did not exist ($p < .001$).

TABLE 5.25

PERCENTAGE DISTRIBUTION OF RESPONSES TO ITEMS ON FACTORS RELATED TO THE ROTC AND ARMY PROGRAMS

COLLEGE ROTC STUDENTS (n = 754)

POSSESSION OF AN ROTC SCHOLARSHIP	
%, no Scholarship	78.5
%, 4-Year Scholarship	7.6
%, 3-Year Scholarship	7.4
%, 2-Year Scholarship	5.5
%, 1-Year Scholarship	1.0

GRADE POINT AVERAGE IN ROTC COURSES	
%, A- to A	44.8
%, B- to B+	45.3
%, C- to C+	9.0
%, D- to D+	0.8
%, Lower than D-	0.1

WHEN DECIDED TO JOIN ROTC	
%, Grade School	2.5
%, Early High School	10.5
%, Late High School	27.4
%, Summer Before Entering College	21.4
%, Freshman Year in College	24.1
%, Sophomore Year in College	14.0

SATISFACTION WITH PERFORMANCE IN ROTC	
%, Very Satisfied	31.2
%, Somewhat Satisfied	48.1
%, Uncertain	11.5
%, Somewhat Dissatisfied	8.2
%, Very Dissatisfied	1.0

WOULD HAVE JOINED ROTC IF NO FINANCIAL BENEFITS?	
%, Definitely Yes	32.0
%, Perhaps	34.5
%, Don't Know	12.3
%, Perhaps Not	11.0
%, Definitely Not	10.3

WOULD JOIN ARMY AFTER COLLEGE IF NO CONTRACTUAL OBLIGATION?	
%, Definitely Not	10.4
%, Perhaps Not	13.3
%, Don't Know	23.0
%, Perhaps Yes	33.3
%, Definitely Yes	20.1

ARMY OFFICERS (n = 654)

POSSESSION OF AN ROTC SCHOLARSHIP	
%, No Scholarship	57.8
%, 4-Year Scholarship	14.1
%, 3-Year Scholarship	4.4
%, 2-Year Scholarship	21.2
%, 1-Year Scholarship	2.4

GRADE POINT AVERAGE IN ROTC COURSES	
%, A- to A	58.2
%, B- to B+	37.6
%, C- to C+	4.2
%, D- to D+	0.0
%, Lower than D-	0.0

SATISFACTION WITH ROTC PROGRAM	
%, Very Satisfied	32.8
%, Somewhat Satisfied	43.5
%, Undecided	3.0
%, Somewhat Dissatisfied	17.1
%, Very Dissatisfied	3.5

RELEVANCE OF ROTC PROGRAM TO ARMY JOB	
%, Very Relevant	11.0
%, Somewhat Relevant	46.5
%, Undecided	8.0
%, Somewhat Irrelevant	19.6
%, Very Irreletant	14.9

MONTHS ELAPSED BETWEEN GRADUATION FROM COLLEGE AND ARMY SERVICE	
%, 1	24.5
%, 2	23.8
%, 3	15.3
%, 4-6	21.4
%, 7-12	8.4
% Over 12	6.6

WAS ASSIGNED BRANCH FIRST CHOICE?	
%, Yes	65.1
%, No	34.9

ATTACHMENT TO ARMY DURING BASIC COURSE	
%, Very Attached	19.0
%, Somewhat Attached	29.4
%, Don't Know	8.9
%, Not Too Attached	25.9
%, Not Attached At All	16.8

SATISFACTION WITH ARMY JOB	
%, Very Satisfied	21.4
%, Somewhat Satisfied	46.2
%, Uncertain	4.6
%, Somewhat Dissatisfied	19.5
%, Very Dissatisfied	8.4

SATISFACTION WITH ARMY PERFORMANCE	
%, Very Satisfied	42.8
%, Somewhat Satisfied	42.6
%, Uncertain	7.0
%, Somewhat Dissatisfied	6.8
%, Very Dissatisfied	0.8

WOULD HAVE JOINED ARMY AFTER COLLEGE IF NO CONTRACTUAL OBLIGATION?	
%, Definitely Not	21.8
%, Perhaps Not	20.9
%, Don't Know	13.4
%, Perhaps Yes	23.1
%, Definitely Yes	20.9

Note. Due to missing values, the number of respondents on which percentages reported in this table were computed may not always correspond to the group total "n". In no case however, were data missing from over 3% of respondents.

TABLE 5.26

CORRELATES OF ROTC/ARMY COMMITMENT AMONG ROTC STUDENTS AND ARMY OFFICERS:

FACTORS RELATED TO THE ROTC AND ARMY PROGRAMS

FACTORS RELATED TO THE ROTC AND ARMY PROGRAMS	RESPONDENT GROUP					
	COLLEGE ROTC STUDENTS			ARMY OFFICERS		
	Relationship with Commitment	Interpretation of Direction of Relationship		Relationship with Commitment	Interpretation of Direction of Relationship	
		High Commitment Group	Low Commitment Group		High Commitment Group	Low Commitment Group
ROTC-related Items						
Possession of ROTC Scholarship	r= .23***	Scholarship	No Scholarship	r= NS		
Grade Point Average in ROTC Courses	r=-.14***	High GPA	Low GPA	r=-.12**	High GPA	Low GPA
When Decided to Join ROTC (range= 1-6)	r=-.18***	Early Decision	Late Decision	NA		
Satisfaction with Performance in ROTC	r=-.23***	Satisfied with Performance	Not Satisfied with Performance	NA		
Would have joined ROTC If No Financial Benefits?	r=-.27***	Yes	No	NA		
Satisfaction with ROTC Program	NA			r=-.23***	High Satisfaction with ROTC Program	Low Satisfaction with ROTC Program
Relevance of ROTC Program to Army Job	NA			r=-.27***	ROTC Program Relevant	ROTC Program Not Relevant
Army-related Items						
Months Elapsed Between Graduation from College & Army Service (open range)	NA			r= NS		
Army Branch	See Table 5.27			See Table 5.27		
Branch First Choice? (range = 1-2)	NA			$X^2(4)$= NS		
Attachment to Army During Basic Course	NA			r=-.29***	High Attachment	Low Attachment
Satisfaction with Army Job	NA			r=-.48***	High Satisfaction with Job	Low Satisfaction with Job
Satisfaction with Army Performance	NA			r=-.17***	High Satisfaction with performance	Low Satisfaction with performance
Would have joined Army after College if No Contractional Obligation?	NA[a]			r= .45***	Yes	No

Note. All r's are Pearson product moment correlations computed on the row variable x commitment. Row variables could range in value from 1-5, unless otherwise indicated. Commitment scores could range from 8-40 for ROTC students, and from 7-35 for Army officers.

[a] This item was part of the Career Commitment Scale for ROTC cadets.

** $p < .01$
*** $p < .001$

These findings question the ability of the ROTC scholarship program to retain officers beyond the period of obligated service. They speak out for the utility of the Basic ROTC program (the "early-joiners") in attracting the truly committed. They call for striving to make ROTC programs relevant to subsequent Army jobs. Most important of all, they document the fact that the truly committed will join and remain in a career path with or without financial benefits or contracts.

Perhaps at this point it is pertinent to refer back to Table 5.25 for a look at the distribution of responses to the items "Would you have joined ROTC if it did not offer any financial benefits?"[6] (asked of cadets) and "After college would you join (have joined) the Army if you did not have any contractual obligations?" (asked of cadets and officers). Approximately 21% of cadets said they would maybe or definitely *not* have joined ROTC if it had not offered any financial benefits. Approximately 24% of cadets and 43% of officers said they would perhaps or definitely *not* join (have joined) the Army after graduation from college without an ROTC contract.

Thus, unless the Army is willing to give up these proportions of cadets and officers, it appears that some financial benefits and some form of contract are a necessity. In setting policy on these matters, how does one combine the finding that benefits and contracts attract people to ROTC/Army with the finding that they correlate with subsequent *low commitment* among those they attract? The answer is found in the social psychological literature on attitude change produced as a function of the magnitude of reward paid to perform the discrepant behavior. The literature consistently says: if you *must* pay a person to perform a discrepant act (in the present case, offer him/her a financial reward to join ROTC/Army), offer the *minimum* amount necessary to get the person to perform the act. Such minimum reward is associated with the greatest subsequent attitude change, i.e., the greatest reduction in perceived discrepancy of the act with one's true feelings. In the present case, offering of financial benefits large enough to attract the numbers the Army needs to ROTC, but not so large as to be perceived by recipients as the sole reason for their joining, should lead to the greatest subsequent commitment to ROTC/Army. Further research can establish what this appropriate "minimum incentive" is.

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[6] Financial benefits offered by ROTC include $100/month stipend for all Advanced ROTC students. In addition scholarships are available for both Basic and Advanced ROTC students. These scholarships pay full tuition, books, and laboratory fees plus $100/month for the duration of the scholarship.

Army Branch and Commitment

The discussion turns now to the final variable of interest: Army branch. ROTC cadets were asked which branch of the Army they intended to join. Army officers were asked which branch of the Army they were currently members of. Responses to this item, along with the mean commitment of cadets and officers in each branch, are presented in Table 5.27. In the table, the Army branches are presented in order of decreasing commitment of officers currently in the branch.

As far as numbers of cadets and officers in each branch are concerned, there was representation for all branches. The number of cadets in the "other" branch category is proportionately much higher than the number of officers in the same category, presumably because the intending drop-outs among the Basic ROTC cadets as well as the "don't know's" are included in this category.

The popular branch choices among the cadets were (in decreasing order of number of cadets intending to join the branch): medical service corps, infantry and military police corps. Over 10% of cadets sampled intended to join each of these branches. As far as actual branch membership among current Army officers was concerned, the best represented branches were signal corps, infantry, field artillery, and adjutant general's corps. Over 10% of officers sampled were in each of these branches.

A scan down column 3 ("Mean Commitment" for cadets) reveals that, for the cadet group, the spread of commitment scores across the branches was not as great as the spread across the various motivations for joining ROTC presented in Table 5.24. This means that intended branch is not as strongly related to commitment as motivation for joining ROTC.

For the cadet group, highest commitment was found among those intending to join the armor, signal corps, and infantry branches; lowest commitment among the intending drop-outs and don't knows in the "other" branch category. This result indicates that definitiveness and sharpness of career plans is a good index of career commitment among students. Chapter 8 will demonstrate this phenomenon more conclusively by showing that perceptions of ROTC and the Army become sharper and more differentiated as one goes from the high school through the college to the Army samples. For the Army officer group, highest commitment was found among the military police corps, quartermaster corps, armor, and medical service corps branches; lowest commitment among the finance corps and "other" branch categories. The relationship between cadet and officer branch commitment ranks was not significant (Spearman rank-order correlation = .38).

TABLE 5.27

THE RELATIONSHIP BETWEEN ARMY BRANCH
AND COMMITMENT TO ROTC/ARMY
AMONG ROTC STUDENTS AND ARMY OFFICERS

ARMY BRANCH	COLLEGE ROTC STUDENTS (INTENDED BRANCH)			ARMY OFFICERS (ACTUAL BRANCH)		
	n	MEAN COMMITMENT	STANDARD DEVIATION	n	MEAN COMMITMENT	STANDARD DEVIATION
Military Police Corps	75	32.04	5.75	23	22.86	8.84
Quartermaster Corps	8	29.53	5.04	25	22.56	7.43
Armor	58	34.31	4.37	49	21.63	6.72
Medical Service Corps	91	31.47	4.87	57	21.52	8.11
Adjutant General's Corps	31	30.19	6.25	66	20.86	7.58
Signal Corps	34	33.71	3.59	80	20.71	8.11
Infantry	75	33.19	5.61	73	20.48	8.89
Ordnance	10	32.10	7.22	29	20.40	9.14
Field Artillery	37	31.76	5.17	69	20.32	7.99
Air Defense Artillery	20	31.49	5.39	32	19.91	7.65
Corps of Engineers	55	31.63	4.20	28	19.50	8.50
Military Intelligence	61	31.54	5.53	15	19.43	8.73
Transportation Corps	22	30.67	5.68	45	18.94	6.64
Chemical Corps	6	30.01	6.19	4	18.63	12.26
Other	105	25.32	7.49	14	17.98	7.58
Finance Corps	30	31.12	4.48	25	16.78	8.09
Total Group	718	31.06	6.10	634	20.46	8.02

Note. The ROTC student commitment scores were based on eight items and could range from 8 - 40; Army officer scores on seven items and could range from 7 - 35. Thus the mean commitment scores of the two groups are not directly comparable.

r_s = .38, NS

Regression Analyses of Career Commitment for Cadets in Basic ROTC, Cadets in Advanced ROTC, and ROTC-Graduate Army Officers in their Period of Obligated Service

All variables which the just described bivariate analyses found to be significantly related to commitment at the .01 level or better were used as predictor variables in a series of stepwise regression[7] analyses of commitment (except for the individual beliefs about ROTC and beliefs about the Army variables; rather than inputting these 54 variables separately, only the total attitudes towards ROTC and attitudes towards the Army scale scores were input). Separate regression analyses were carried out for cadets in *Basic ROTC*, for cadets in *Advanced ROTC*, and for *Army officers*, in order to isolate the best determinants of commitment at each of these progressively more advanced career stages.

Prior to being input into the regression analyses, all nominal variables were rescored as ordinal variables. Rescoring was done on an *a posteriori* basis, in a manner designed to maximize the variables' correlation with commitment. For example, the nominal variable "most important influence in joining ROTC" was rescored so that the influence associated with the greatest commitment among its 14 response categories (Army commission; see Table 5.24) was assigned a score of 14, the influence associated with the next highest commitment (patriotism) was assigned a score of 13; and so forth. The response category associated with the lowest commitment (easy elective/extracurricular activity) was assigned a score of 1.

Results of the stepwise regression analysis of commitment for cadets in Basic ROTC are given in Table 5.28; results for cadets in Advanced ROTC and for Army officers are given in Tables 5.29 and 5.30. Before discussing these results it must be pointed out that all regression results were "cross-validated."

[7]The stepwise regression program of the Statistical Package for the Social Sciences was used. This program computes a sequence of multiple linear equations in a stepwise manner. At each step one variable is added to the regression equation. The variable added is the one which makes the greatest reduction in the error sum of squares. Equivalently, it is the variable which has the highest partial correlation with the dependent variable when the variables which have already been added are partialled out. Variables were added until the next variable no longer added at least .01 to the predictor set's multiple correlation with commitment.

TABLE 5.28

MAIN RESULTS OF STEPWISE REGRESSION

OF CAREER COMMITMENT:

COLLEGE BASIC ROTC SAMPLE

STEP NUMBER	NAME OF VARIABLE SELECTED	MULTIPLE R	R^2	R^2 CHANGE
1	Most Important Influence in Decision to Join ROTC (IMPIFL)[a]	.54	.29	.29
2	Score on Attitudes Towards the Army Scale (ATTARMY)	.66	.43	.14
3	Intended Army Branch (ARMBR)[a]	.69	.47	.04
4	Leadership: Expected Satisfaction in Army (LDRSHPS)[b]	.70	.49	.02
5	Possession of an ROTC Scholarship (RTCSLR)[a]	.71	.50	.01

Note.

- Number of Original Predictor Variables Input: 79
- Regression Equation Developed on Sample 1, Basic ROTC Group (n = 188):

  Career Commitment = 0.62 + 0.60 (IMPIFL) + 0.21 (ATTARMY) + 0.25 (ARMBR) - 1.10 (LDRSHPS) + 1.78 (RTCSLR)

- Multiple Correlation R, Sample 1 (n = 188) = .70
- Cross-validation r, Sample 2 (n = 187) = .69

[a]This item is a nominal variable and was thus rescored prior to being input in the regression analysis. Scoring details are given in the text.

[b]This item was scored with a 1 reflecting a very satisfactory rating and a 5 a very unsatisfactory rating.

TABLE 5.29

MAIN RESULTS OF STEPWISE REGRESSION

OF CAREER COMMITMENT: COLLEGE ADVANCED ROTC SAMPLE

STEP NUMBER	NAME OF VARIABLE SELECTED	Multiple R	R^2	R^2 CHANGE
1	Score on Attitudes Towards the Army Scale (ATTARMY)	.52	.27	.27
2	Most Important Influence in Decision to Join ROTC (IMPIFL)[a]	.60	.36	.09
3	Would Have Joined ROTC if No Financial Benefits? (NFNCL)[b]	.63	.39	.03
4	Possession of an ROTC Scholarship (RTCSLR)[a]	.65	.42	.03
5	Intended Army Branch (ARMBR)[a]	.66	.44	.02
6	Adventure: Expected Satisfaction in Army (ADVTRS)[c]	.68	.46	.02
7	More Schooling: Importance Rating (MRSCH)[d]	.68	.47	.01
8	Feedback: Expected Satisfaction in Army (FDBCKS)[c]	.69	.48	.01
9	Self Improvement and Development: Expected Satisfaction in Army (IPRVDVS)	.70	.49	.01

Note.

- Number of Original Prediction Variable Input: 79
- Regression Equation Developed on Sample 1, Advanced ROTC Group (n = 186):

  Career Commitment = 21.35 + .09 (ATTARMY) + .31 (IMPIFL) - 1.26 (NFNCL) + 2.23 (RTCSLR) + 0.17 (ARMBR) - 1.21 (ADVTRS) - 0.81 (MRSCH) - 1.13 (FDBCKS) - 1.12 (IPRVDVS)

- Multiple Correlation R, Sample 1 (n = 186) = .71
- Cross Validation r, Sample 2 (n = 186) = .69

[a]This item is a nominal variable and was thus rescored prior to being input in the regression analysis. Scoring details are given in the text.

[b]This item was scored as follows: 1 = definitely yes; 5 = definitely not.

[c]This item was scored as follows: 1 = very satisfactory; 5 = very unsatisfactory.

[d]This item was scored as follows: 1 = extremely important; 5 = not important at all.

TABLE 5.30

MAIN RESULTS OF STEPWISE REGRESSION

OF CAREER COMMITMENT: ARMY OFFICER SAMPLE

STEP NUMBER	NAME OF VARIABLE SELECTED	Multiple R	R^2	R^2 CHANGE
1	Score on Attitudes Towards the Army Scale	.65	.42	.42
2	Would Have Joined Army if No Contract Existed? (JNARM)[b]	.69	.47	.05
3	Most Important Value (MSTIMP)[a]	.71	.50	.03
4	Satisfaction with Army Job (SATJOB)[c]	.73	.53	.03
5	Adventure: Importance Rating (ADVTR)[d]	.74	.55	.02
6	Parents' Rating of an Army Officer Career (PARTAC)	.75	.56	.01
7	Score on Career Development Scale, Establishment Stage (ESTABLSH)	.76	.57	.01

Note.

- Number of Original Predictor Variables Input: 82
- Regression Equation Developed on Sample 1, Army Officer Group (n = 317):

  Career Commitment = -13.04 + .22 (ATTARMY) + 1.13 (JNARM) + 0.26 (MSTIMP) -0.76 (SATJB) - 1.37 (ADVTR) + 1.44 (PARTAC) + 0.15 (ESTABLSH)

- Multiple Correlation R, Sample 1 (n = 317) = .77
- Cross-validation r, Sample 2 (n = 316) = .62

[a]This item is a nominal variable and was thus rescored prior to being input in the regression analysis. Scoring details are given in the text.

[b]This item was scored as follows: 1 = definitely not; 5 = definitely yes.

[c]This item was scored as follows: 1 = very satisfied; 5 = very dissatisfied.

[d]This item was scored as follows: 1 = extremely important; 5 = not important at all.

Psychometricians have often noted (*cf.* Herzberg, 1969, Mosier, 1951) that sample R is a biased estimate of the degree of relationship between predictors and criterion, being in general larger than true population R. This is so because the process of minimizing the average squared error in prediction produces an optimized linear combination fitted to the idiosyncracies of the sample.

A better estimate of the population correlation is obtained when regression weights calculated in an original sample are applied to a second sample. The correlation in the second sample is called the cross-validation r. In order to permit cross-validation of regression weights, the Basic ROTC, Advanced ROTC, and Army officer groups were each divided into random halves: Sample 1, consisting of all respondents whose subject numbers ended in an *odd* number; and Sample 2, consisting of all respondents whose subject numbers ended in an *even* number. The footnotes to Tables 5.28, 5.29, and 5.30 give the regression equation and multiple correlation derived from Sample 1, and the multiple correlation (cross-validation) r obtained when the equation developed on Sample 1 was applied to Sample 2.

The tables' footnotes report that the multiple R's derived from Sample 1 were .70, .71, and .77 for the Basic ROTC, Advanced ROTC, and Army officer groups, respectively. These R's shrunk to .69, .69, and .62 during cross-validation on Sample 2. The small shrinkage during cross-validation indicates that the regression weights are stable, especially for the ROTC samples. Indeed, the predictor sets isolated are potent determinants of commitment to ROTC/Army, explaining about half of the variance in intentions to continue in the career path. It is to the content of these predictor sets that the discussion now turns.

Regression Analysis of Commitment, Basic ROTC Sample

Table 5.28 reveals that five variables emerged as the prime predictors of commitment among Basic ROTC cadets. In descending order of importance these variables were: (a) most important influence in decision to join ROTC; (b) attitudes towards the Army scale score; (c) intended Army branch; (d) expected satisfaction with the "leadership" dimension in the Army; and (e) possession of an ROTC scholarship. *The most highly committed cadets in Basic ROTC joined ROTC to receive an Army commission or to exhibit patriotic feelings; had*

favorable attitudes towards the Army; intended to join the armor, signal corps, or infantry branches; expected to find excellent "leadership" in the Army; and/or possessed an ROTC scholarship.

Regression Analysis of Commitment, Advanced ROTC Sample

Four of the five variables in the equation for the Basic ROTC cadets (all except expected satisfaction with Army leadership) also appeared in the equation for Advanced ROTC cadets. The order of the first two variables was, however, reversed, with attitudes towards the Army being the best predictor, and most important influence in joining ROTC the second best. A new variable emerging in the Advanced ROTC equation was response to the item "Would you have joined ROTC if it did not offer any financial benefits?" This variable was third to appear in the stepwise regression equation for Advanced ROTC cadets, followed by the already mentioned variables of possession of an ROTC scholarship and intended Army branch.

Finally emerging were four new variables, three of which involved expected satisfaction with the Army (on the dimensions adventure, feedback on performance, and self-improvement and development), and one of which was a job dimension importance rating (more schooling).

Thus, *highly committed Advanced ROTC cadets had favorable attitudes towards the Army; joined ROTC to receive an Army commission or exhibit patriotic feelings; would have joined ROTC even if it did not offer any financial benefits; possessed an ROTC scholarship; intended to join the armor, signal corps, or infantry branches; and expected to find adventure, feedback on performance, and self-improvement and development in the Army. They also believed in the importance of more schooling for themselves.*

Regression Analysis of Commitment, Army Officer Sample

The Army officer regression equation for commitment was different from that of the ROTC cadets, in part because two of the prime predictors of cadets' commitment -- "What was the most important influence in your joining ROTC" and "Would you have joined ROTC if it did not offer any financial benefits?" -- were, unfortunately, not asked of the officer group.

As was the case with the Basic and Advanced ROTC cadets, attitudes towards the Army was the prime predictor of officers' commitment, followed by

an item somewhat analogous to the "Would have joined ROTC if no financial benefits" item: the item "After college, would you have joined the Army if you did not have any contractual obligations?" Both these items refer to the "purity" with which the ROTC/Army career path is pursued...for its own sake, and regardless of financial benefits or the existence of a contract.

The third best predictor of officers' commitment was most important value; the fourth was satisfaction with present Army job; the fifth was importance attached to "adventure" in a job; the sixth was parents' rating of an Army officer career, as perceived by the respondent; and the seventh was score on the establishment stage of the career development scale.

Highly committed Army officers had favorable attitudes towards the Army, would have joined the Army after college even if no contract existed, valued patriotism or leadership as their most important value, were satisfied with their present Army job, looked for adventure in a job, perceived their parents as attributing high status to an Army officer career, and were vocationally mature in terms of having thought about and acted on matters relating to their career.

CHAPTER 6
PATH MODELS OF CAREER COMMITMENT AMONG ROTC CADETS AND ARMY OFFICERS

Having examined in detail the predictors of participation in and commitment to a ROTC/Army career, the next question to be investigated is: how does commitment develop in an individual? Is it possible to order the prime predictor variables into a causal sequence starting with the demographic background variables through the personality and socio-psychological variables to commitment?

The theoretical, tentative model of commitment presented in Chapter 1 suggests what the organization of such a scheme might look like. According to the theoretical model, certain primary and secondary socialization variables, coupled with innate aptitudes, cause a person to have a value-interest-aspiration profile compatible with military life. Springing from such a value set are clusters of military-related attitudes and beliefs. Positive attitudes could lead to career exploration in ROTC. Positive experiences in ROTC strengthen a person's resolve to remain in ROTC, and cause him to have high expectations of Army life. If these expectations are met by a satisfying experience as an Army officer, further heightened career commitment results.

The bivariate and even multivariate analyses discussed in the previous chapters document fully the relationships between the predictor and criterion variables, but are not powerful enough to test the complex *causal* postulates of the tentative model. A statistical technique does exist, however, for developing and testing causal hypotheses of this type. It is called *path analysis*.

Path analysis is primarily a method of decomposing and interpreting linear relationships among a set of variables, by assuming that: (a) a (weak) causal order among the variables is known, and (b) the relationships among the variables are causally closed to outside influence. Originally developed by biologists to estimate coefficients of kinship or inbreeding (S. Wright, 1960), the method has been elaborated and applied to social phenomena by sociologists (for a detailed discussion and many examples see Blau and Duncan, 1967). This chapter will present and test path models of career commitment among ROTC cadets and Army officers based on the theoretical, tentative model of commitment presented in Chapter 1 and empirically evaluated in Chapters 4 and 5.

Theoretical Considerations

Consider the variable clusters in the theoretical model of career commitment given in Figure 1.2 (boxes are predictor variable clusters; diamonds are criterion variable clusters):

Box 1: Background and Primary Socialization Variables
Box 2: Aptitudes and Achievement
Box 3: Secondary Socialization Conditions
Box 4: Values, Interests and Aspirations
Box 5: Attitudes
Box 6: Information about ROTC/Army
Box 7: Balance of Costs and Rewards of ROTC (prior to joining ROTC)
Diamond 8: Decision to Join Basic ROTC Program
Box 9: ROTC Program Experiences (while in ROTC)
Diamond 10: Decision to Continue in ROTC
Box 11: Balance of Costs and Rewards of Army Career (prior to entering Advanced ROTC course)
Diamond 12: Decision to Join Advanced ROTC Program
Diamond 13: Decision to Join Regular Army or Active Duty Reserve
Box 14: Army Experiences
Box 15: Balance of Costs and Rewards of Army Job (based on Army experience
Diamond 16: Decision to Voluntarily Extend Army Stint

Chapter 1 discussed at length how these clusters were organized into an assumed causal sequence, with the prior variables (variables with a lower box number) presumed to affect the latter variables. The discussion will not be repeated here. Suffice it to say that assumptions about causal sequence were based on two considerations: (a) *temporal ordering*, e.g., the background and primary socialization variables in Box 1 represent characteristics a person is either born with (such as race) or exposed to in early childhood (such as family stability); they can thus be assumed to be causally prior to variables such as personal values (Box 4) acquired and formed in later life; (b) *generality of the construct measured*, e.g., the personal values construct (Box 4) is more general than the construct "attitudes towards ROTC" (Box 5). Values are pervasiv they underlie a whole gamut of attitudes and decisions unrelated to an Army caree This generality of the value construct is ascertainable from its operationalization as a questionnaire item. Nowhere in the item are specific attitudes towards one concept measured. The items measuring beliefs about ROTC, on the other hand are highly specific in construction, focusing solely on various dimensions of ROTC. For this reason it is justified to assume that value set is causally prior to the specific attitudes measured in Box 5.

Selection and Measurement of Variables for the Empirical Path Models

In constructing the empirical path models of career commitment, the following steps were taken:

1. Bivariate relationships between variables in each predictor cluster and the dependent variables of participation and commitment were re-examined.

2. A set of prime predictor variables was isolated which (a) gave as complete a representation as possible of the general tentative model and (b) emerged from discriminant function and regression analyses as having the strongest relationship with participation and commitment.

Two empirical models were developed, the first representing the process of career commitment among Army officers, the second representing the process of career commitment among ROTC cadets. Figure 6.1 gives the component variables of each empirical model; the figure also maps the components to the general tentative model, and gives details on how the components were scored.

As Figure 6.1 shows, the officer and cadet models differ only with respect to a few of the variables involved. The first six variables of the two models are identical and are labeled according to their hypothesized sequential order. X_{1A} ("military socialization") and X_{1B} ("frequent moving while growing up") are assumed to be very early determinants of the individual's personality, antecendent to all other influences, and thus correspond to the background and primary socialization variables (Box 1) of the tentative model.[8]

Box 2 of the tentative model (aptitudes and achievement) is not represented in the empirical models because these variables were not found to be strongly related to participation in or commitment to a ROTC/Army career. Box 3 of the tentative model (secondary socialization conditions) is represented by the variable X_2 "parents encourage/approve of military career", Box 4 (values, interest and aspirations) by X_3 "value set compatible with military life", Box 5 (attitudes) by X_4 "subscription to military ideology" and X_5 "look for chance to be a leader and for adventure in job." The causal priority of X_4 over X_5 is dictated by the fact that X_5 represents an actual intention, a more "active" attitude than X_4, which denotes only the passive acceptance of a set of norms.

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[8] Neither X_{1A} nor X_{1B} is assumed to be a direct cause of the other, so their relationship will later be represented as a *curved arrow* (indicating an unanalyzed relationsip) with the raw correlation between the two variables as a label.

FIGURE 6.1

COMPONENTS OF THE EMPIRICAL MODELS

OF CAREER COMMITMENT FOR ARMY OFFICERS AND FOR ROTC STUDENTS

BOX NO. IN SPECIFIC EMPIRICAL MODEL	BOX NO. IN GENERAL TENTATIVE MODEL	NAME OF VARIABLE	SCHEMA FOR CONSTRUCTING VARIABLE
		EMPIRICAL MODEL FOR ARMY OFFICERS	
X_{1A}	1	Military Socialization	Sum of responses to items Length of father's military experience + Contact with military families while growing up[a] + Present contact with military families[a]
X_{1B}	1	Frequent moving while growing up	Responses to item Number of communities lived in while growing up[a]
X_2	3	Parents encourage/approve of military career	Sum of response to items Parents' opinion of military + Parents' rating of an Army officer career (as perceived by respondent)
X_3	4	Value set compatible with military life	1) Values were rank ordered from 1 to 14 in accordance with decreasing commitment attached to them by Army officer group as whole (see Table 5.10) 2) Value set = 3 (rank assigned to most important value) + 2 (rank assigned to second most important value) + 3 (rank assigned to third most important value) - 3 (rank assigned to least important value) - 2 (rank assigned to second least important value) - 1 (rank assigned to third least important value)
X_4	5	Subscription to military ideology	Score on military ideology scale
X_5	5	Look for chance to be leader and for adventure in job	Sum of importance ratings attached to the job dimensions, chance to be leader[a] and adventure[a]
X_6	13	Would have joined Army even without ROTC contract	Response to item Would have joined Army after college even without ROTC contract
X_7	14	High satisfaction with Army job	Score on attitudes towards the Army scale + Response to item How satisfied are you with your Army job
X_8	dependent variable	Commitment to an Army career	Score on career commitment scale
		EMPIRICAL MODEL FOR ROTC CADETS	
X_{1A}	1	Military socialization	Same as for Army officers (see above)
X_{1B}	1	Frequent moving while growing up	"
X_2	3	Parents encourage/approve of military career	"
X_3	4	Value set compatible with military life	"
X_4	5	Subscription to military ideology	"
X_5	5	Look for chance to be a leader and for adventure in job	"
X_6	8	Join ROTC to get Army commission or for patriotic reasons	1) Important influences in decision to join ROTC were rank ordered from 1 to 15 in accordance with decreasing commitment attached to them by cadet group as a whole (see Table 5.24) 2) Score on this motivation variable = rank assigned to respondent's most important influence in joining ROTC
X_7	9	Satisfaction with ROTC program	Score on attitudes towards ROTC scale
X_8	11	High expectations re Army life	Score on attitudes towards the Army scale
X_9	dependent variable	Commitment to ROTC/Army	Score on career commitment scale

[a]These variables were rescored so that 5 = response category positively related to commitment, and 1 = response category negatively related to commitment.

The models for officers and cadets diverge with respect to the subsequent variables because officers have actually experienced Army life, while cadets' perceptions of the Army are limited to mere expectations. In both models, X_6 is a measure of the initial motivation spurring the individual to participate in the Army or in ROTC: "would have joined Army even without ROTC contract" (officer model) and "join ROTC to get Army commission or for patriotic reasons" (cadet model). Both these variables measure respondents' motivations prior to assumption of their present military position (Boxes 8 and 13 of the tentative model). The new secondary socialization conditions facing participants subsequent to joining ROTC/Army (Boxes 9 and 14 of the tentative model) are measured by the satisfaction of the individual with his present status; thus, X_7 denotes "satisfaction with Army job" for officers and "satisfaction with ROTC program" for cadets.

For the officer model, commitment is the next variable (X_8). Commitment is thus assumed to be explained by the total effect of all the antecedent variables X_1 to X_7. There is an extra step in the commitment model for cadets: all the prior variables are assumed to determine the cadet's *expectations* with respect to Army life (Box 11 of the tentative model; X_8 in the empirical model), which in turn influences further commitment to remaining in the career path (X_9).

The two empirical models are now complete. There are, however, two variables that have not been introduced so far in the discussion, although they would seem a priori to influence to a considerable extent the process of commitment: race and, in the case of cadets, the extent of the obligations they have contracted with the Army. There is strong reason to believe that these two variables interact with the empirical models' component variables in a *non-linear* manner, by affecting the existing *relationships* among the variables. Because path analysis can only deal with linear relationships among variables, the empirical models were estimated separately for subsamples distinguished by the "treatment" variables. Thus, separate path models were computed for Black and White officers, and for cadets in Basic and Advanced ROTC. In order that all cadets in the Basic ROTC subsample would be truly free of all obligations to the Army, cadets in Basic ROTC who possessed an ROTC scholarship (and who

are thus obligated to four years of active duty service in the Army) were dropped from the Basic ROTC subsample.

Estimation Procedures

The following steps were taken to compute the final path coefficients among the variables in the models:

1. Coefficients were estimated assuming that all variables prior to a given one affected it.

2. Paths with a coefficient < .10 in a given equation were removed from said equation.

3. Path coefficients were recomputed without the variables eliminated in step 2.

Figures 6.2 and 6.3 give the final path models for White and Black officers, respectively. Figures 6.4 and 6.5 then give the final path models for Basic ROTC cadets without a scholarship, and for Advanced ROTC cadets. Dotted arrows in each figure refer to paths with coefficients found to be insignificant[9] in the recomputation done in step 3 above. Such insignificant path coefficients are followed by an asterisk (*) to denote their tentativeness.

Officers' Commitment

It must be pointed out that many of the coefficients for the Black officer sample are insignificant (see Figure 6.3), a consequence of the small sample size for this group. Any substantive interpretation of these coefficients should therefore be considered as very tentative. The same remark applies to the two insignificant paths in the White officer figure (6.2).

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[9]Statistical significance was assessed by testing the null hypothesis that a coefficient is zero. To do this, an interval based on the standard error of estimation was computed, at the 5% level. If the numerical estimate of the coefficient fell within this interval, it was considered insignificant: that is, it could have been obtained by sampling error alone from a population from which the "true" parameter is zero.

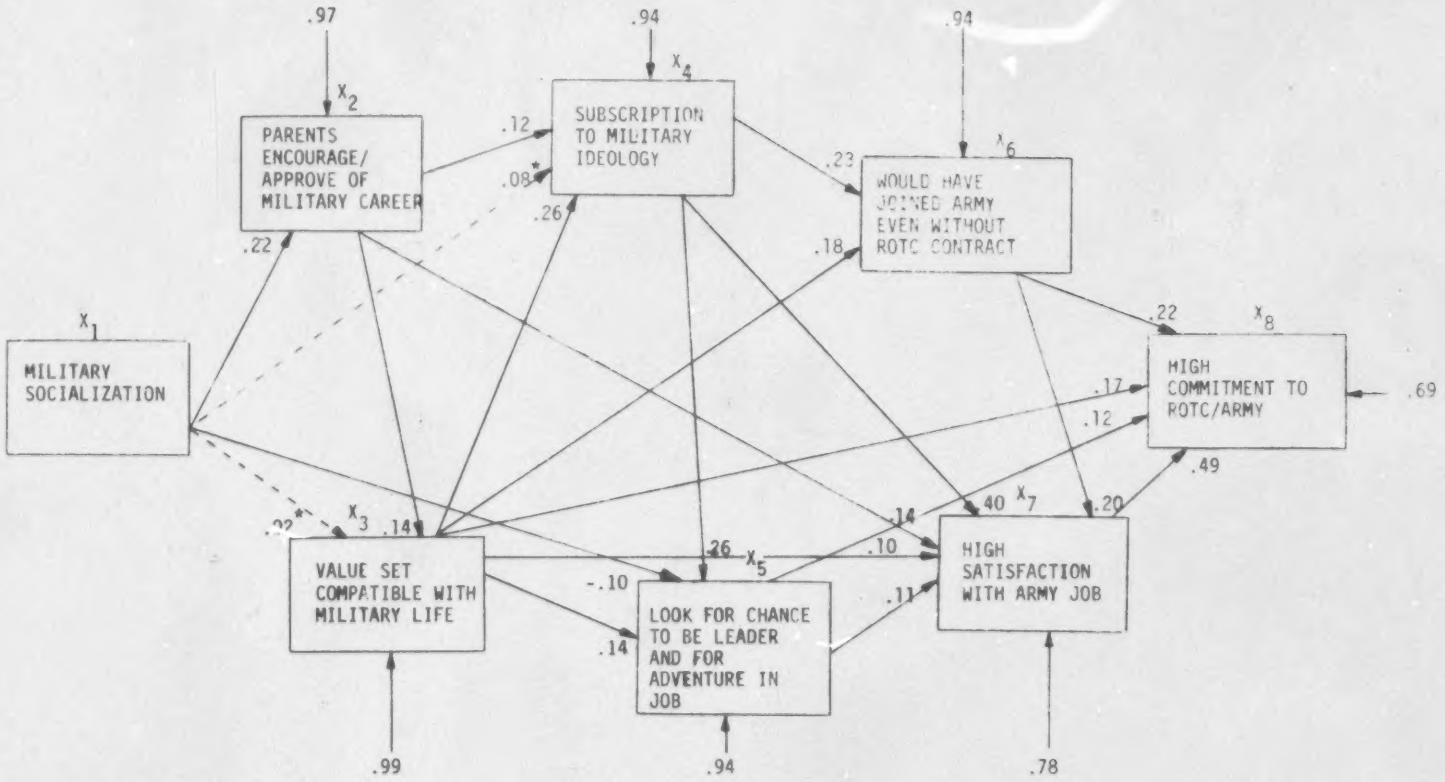

FIGURE 6.2 A PATH MODEL OF THE CAREER COMMITMENT PROCESS FOR ARMY OFFICERS (DATA FROM 539 WHITE OFFICERS)

Note: All paths below .10 were eliminated prior to computation of these final paths.

------- Insignificant Paths

* Insignificant Path Coefficients

_____ Significant Paths

X_{1B} does not appear in this model because its effects on the other variables were discovered to be insignificant during the final estimation procedure.

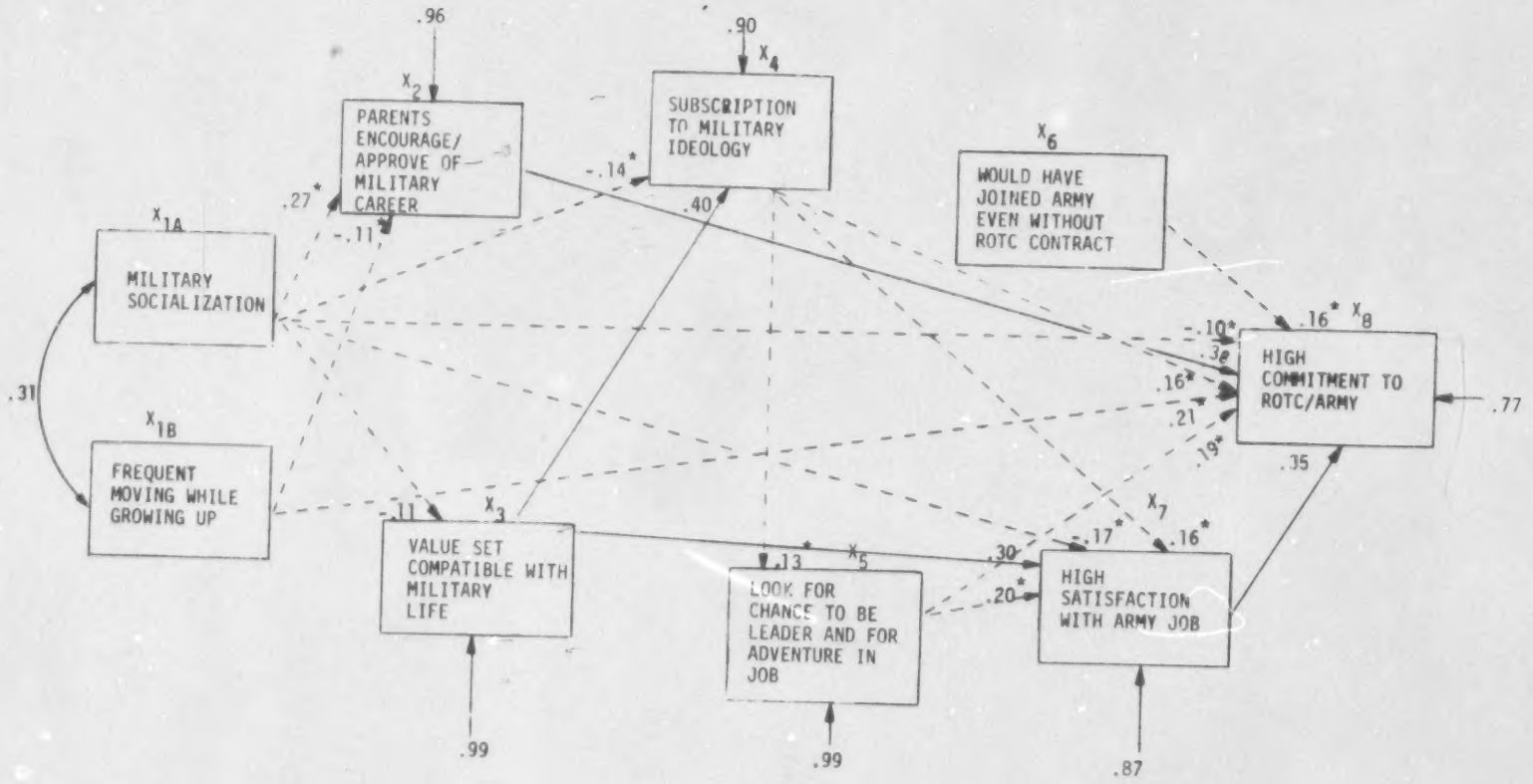

FIGURE 6.3 A PATH MODEL OF THE CAREER COMMITMENT PROCESS FOR ARMY OFFICERS (DATA FROM 57 BLACK OFFICERS)

ote: All paths below .10 were eliminated prior to computation of these final paths.

------- Insignificant Paths

* Insignificant Path Coefficients

_____ Significant Paths

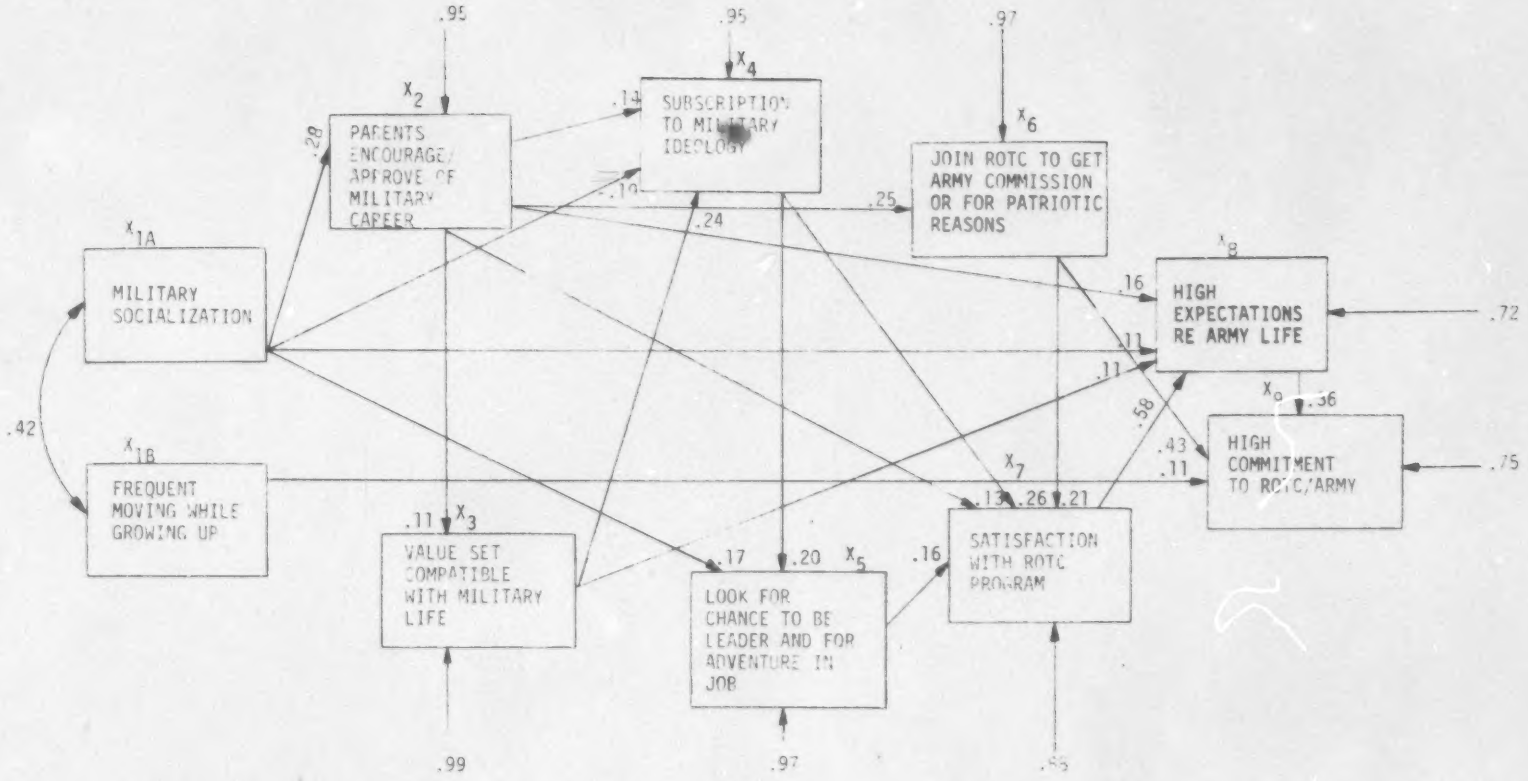

FIGURE 6.4 A PATH MODEL OF THE CAREER COMMITMENT PROCESS FOR ROTC CADETS WITHOUT ANY BEHAVIORAL OBLIGATION TO THE ARMY. (DATA FROM 338 CADETS IN BASIC ROTC AND WITHOUT A SCHOLARSHIP)

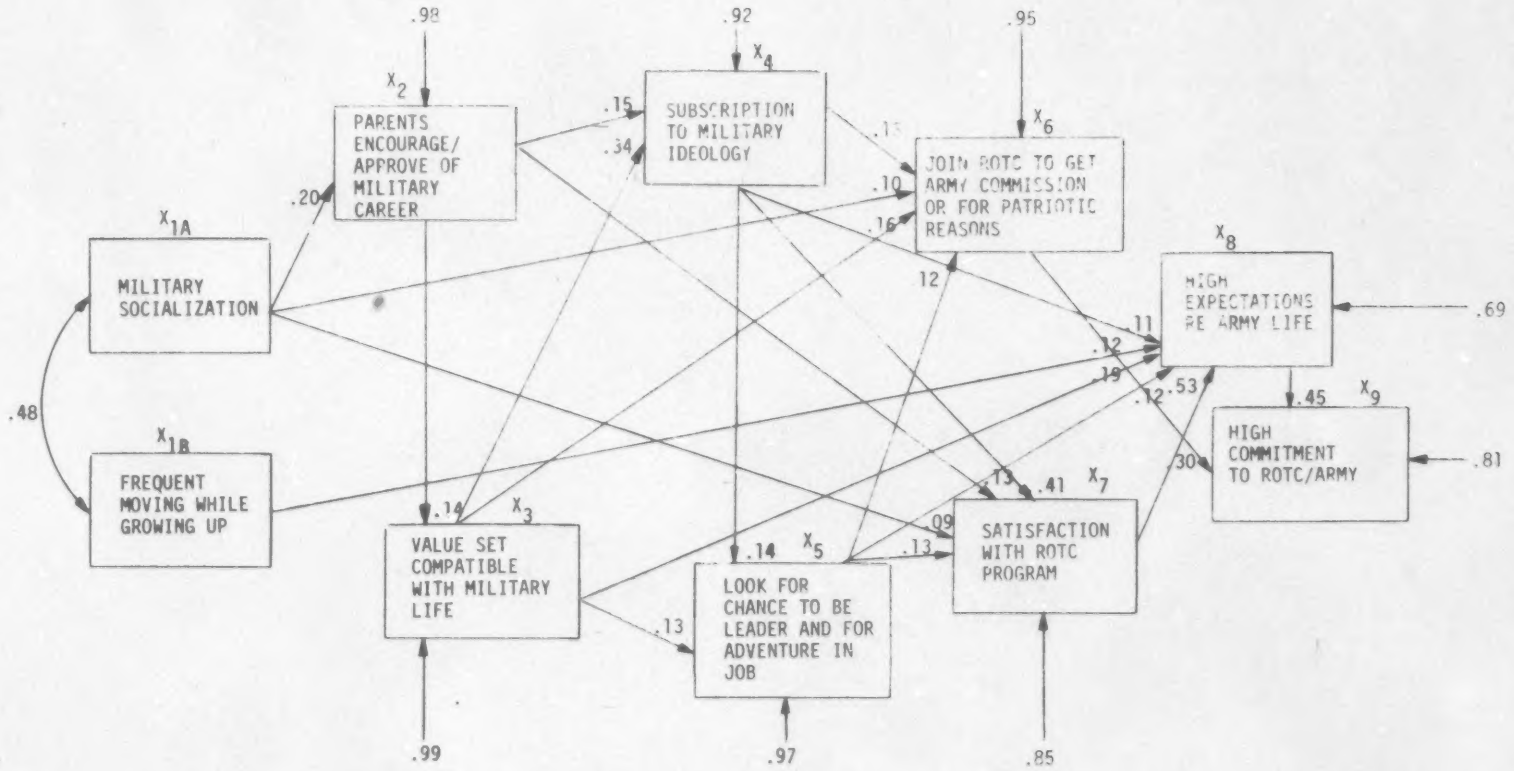

FIGURE 6.5 A PATH MODEL OF THE CAREER COMMITMENT PROCESS FOR ROTC CADETS OBLIGATED TO THE ARMY
(DATA FROM 369 CADETS IN ADVANCED ROTC)

The officer model explains a substantial fraction of the variance of the main dependent variable, commitment (X_8): 53% for White officers and 40% for Black officers.[10] Furthermore, job satisfaction (X_7) appears as a strong determinant of commitment: a standard deviation increase in satisfaction produces an increase in commitment of .49 and .35 standard deviation for White and Black officers, respectively. In the case of White officers, satisfaction is the major cause of commitment. The results for Black officers, however, show a larger direct causal effect for X_2("parents encourage/approve of military career"): .38. This is surprising because X_2 may be considered a quite remote causal factor in the career commitment process, one that could be expected to influence commitment mostly indirectly, through its effect on intermediate variables. For White officers, the direct effect of X_2 on commitment is zero.

In order to gain better insight into the respective roles of the model's independent variables in the commitment process, it is necessary to consider the *total effects* --direct plus indirect-- of these variables on commitment.[11] The results of the computations are shown in Table 6.1. They allow comparison of the effect of the predictor variables across the two samples, irrespective of the detailed "mechanisms" of causality which are represented by the direct paths. The most striking differences appear with respect to the total effects of X_2 ("parents encourage/approve of military career") and X_6 ("would have joined Army even without ROTC contract"). The effect of X_2 remains much larger for Black officers (.38) than for White officers (.14), despite the fact that in the Black sample X_2 has only a direct effect on commitment while in the White sample it has more indirect importance (through X_3, X_4, X_7). By contrast, the effect of X_6 ("would have joined Army even without ROTC contract") is much lower for Blacks than for Whites; for the latter group, X_6 has a strong indirect effect through job satisfaction (X_7). Combining the two findings, the difference between the two samples might be characterized as follows: commitment of White officers is largely a result of predisposition for an Army career *prior* to

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[10] The % of explained variance may be readily computed from the residual paths shown in figures: if p denotes the residual path and R^2 the % of explained variance, then $p^2 = 1 - R^2$, so that $R^2 = 1 - p^2$.

[11] One of the distinct advantages of path analysis over conventional regression analysis is that it allows for computation of the indirect effect of one variable on another via all the intervening variables in the model.

TABLE 6.1

TOTAL EFFECTS OF THE INDEPENDENT VARIABLES

ON COMMITMENT, OFFICER GROUPS

VARIABLE NO.	VARIABLE NAME	TOTAL EFFECT FOR	
		WHITE OFFICERS	BLACK OFFICERS
X_7	High satisfaction with Army job	.49	.35
X_6	Would have joined Army even without ROTC contract	.32	.16
X_5	Look for chance to be a leader and for adventure in job	.17	.26
X_4	Subscription to military ideology	.31	.24
X_3	Value set compatible with military life	.21	.21
X_2	Parents encourage/approve of military career	.14	.38
X_{1A}	Military socialization	.03	-.11
X_{1B}	Frequent moving while growing up	.00	.21

contact with the Army (measured by X_6), such predisposition being presumably the resultant of all antecedent influences on the individuals. The commitment of Black officers, on the other hand, appears to be determined directly by parental encouragement and, given the small coefficient of X_6, by experiences occuring *after* contact with the Army through ROTC.

The effect of X_3 (value set compatible with military life) is identical for both samples, but the causal mechanism is quite different: mostly direct for White officers, and through job satisfaction for Black officers. Finally, the desire for leadership and adventure (X_5) appears as a somewhat more important commitment determinant for Black officers.

Students' Commitment

The results for students in Basic and Advanced ROTC are represented in Figure 6.4 and 6.5, respectively. An interesting feature, valid in both samples, is that the model is more successful in explaining the expectations of students with respect to Army life (X_8) than their commitment (X_9). For the first sample (Basic ROTC), the R^2 of X_8 is .48 while the R^2 of X_9 is .44. For the second sample (Advanced ROTC) the R^2's are .53 and .35 respectively. Another common pattern is found in the fact that, for both student samples, the effect of satisfaction with the ROTC program (X_7) on commitment (X_9) is not direct. Instead, X_7 affects X_9 through the intermediate variable "expectations with respect to Army life." The mechanism by which the ROTC experience influences later commitment is very clear from the data: satisfaction with the ROTC program causes the individual to have a better opinion of the advantages of military life, and it is these more favorable expectations about the Army which increase commitment. The direct effect of Army expectations on commitment is high for the two groups: .36 and .45 respectively. The indirect effects of ROTC satisfaction on commitment via the Army expectations variable are high as well as similar: .21 and .23, for the two cadet groups.

One major difference between commitment processes for the two cadet groups appears among the "proximate causes" of commitment: the direct effect on commitment of the variable X_6, "join ROTC to get Army commission or for patriotic reasons" is higher for the Basic ROTC group (.43) than for the Advanced ROTC group (.30.)

Furthermore, in the case of the Basic ROTC group, there is an indirect path from X_6 through X_7 and X_8 to commitment, which raises the total effect of X_6 to .47. This high effect could probably have been expected: X_6 represents attitudes of the individual *prior* to joining the ROTC program, which are likely to be more important during the early phases of training. For the Advanced ROTC students, more recent experiences take precedence over these a priori attitudes.

Further interesting patterns in the mechanism of commitment emerge from examination of the total causal paths of the independent variables. These coefficients are presented in Table 6.2 for the two cadet groups. The "value set" or "attitude" variables X_3, X_4 and X_5 all have a negligible effect among the younger cadets, (.05, .06, .03) but their causal importance is substantial for advanced students (.23, .20, .12). This suggests that relatively basic socio-psychological characteristics of the individual (value set, acceptance of military norms and predisposition for leadership and adventure) become more essential determinants of commitment for trainees who are already relatively well advanced in the ROTC program. The finding is consistent with the hypothesis that the "quality" of commitment is not the same in the two groups: the model, when applied to students in Basic ROTC, isolates the mechanisms of what could be called "early commitment", the commitment of individuals who are not yet subjected to contractual obligations. By contrast, the commitment of advanced trainees corresponds to a "long-term" commitment for which various costs have already been assumed. This type of commitment, then, depends more on the degree of "fit" between the global personality of the individual and the military environment.

This hypothesis is further confirmed by a comparison of the total effects of the most "remote" variables in the model: "military socialization" (X_{1A}), "frequent moving while growing up" (X_{1B}), and "parents encourage/approve of military career" (X_2). If the hypothesis is correct, these remote variables should have more weight in the "early commitment" process. It is indeed the case, as Table 6.2 shows (.11, .11, .23 versus .07, .05, .09).

These empirical results suggest an interesting additional inference: if the commitment process for advanced ROTC students is more of the "long-term" type, one would expect the underlying mechanisms for these students to be more similar to the ones characterizing officers, whose commitment is even more subjected to contractual obligation. A comparison of the total coefficients for White officers, cadets in Advanced ROTC, and cadets in Basic ROTC, is presented in Table 6.3. Reading from right to left one discovers that the

TABLE 6.2

TOTAL EFFECTS OF THE INDEPENDENT VARIABLES

ON COMMITMENT, CADET GROUPS

VARIABLE NO.	VARIABLE NAME	TOTAL EFFECT FOR	
		CADETS IN BASIC ROTC	CADETS IN ADVANCED ROTC
X_8	High expectations re Army life	.36	.45
X_7	Satisfaction with ROTC program	.21	.23
X_6	Join ROTC to get Army commission or for patriotic reason	.47	.30
X_5	Look for chance to be a leader and for adventure in job	.03	.12
X_4	Subscription to military ideology	.06	.20
X_3	Value set compatible with military life	.05	.23
X_2	Parents encourage/approve of military career	.23	.09
X_{1A}	Military socialization	.11	.07
X_{1B}	Frequent moving while growing up	.11	.05

TABLE 6.3

COMPARISON OF COMMITMENT PROCESSES OF WHITE OFFICERS, CADETS IN ADVANCED ROTC, AND CADETS IN BASIC ROTC

VARIABLE NO.	VARIABLE NAME	TOTAL EFFECT FOR		
		WHITE OFFICERS	CADETS IN ADVANCED ROTC	CADETS IN BASIC ROTC
X_5	Look for chance to be leader and for adventure in job	.17	.12	.03
X_4	Subscription to military ideology	.31	.20	.06
X_3	Value set compatible with military life	.21	.23	.05
X_2	Parents encourage/approve of military career	.14	.09	.23
X_{1A}	Military socialization	.03	.07	.11
X_{1B}	Frequent moving while growing up	.00	.05	.11

weight of the socio-psychological variables X_3, X_4, and X_5 increases generally from the Basic ROTC to the Army officer stages, while the importance of remote variables decreases. Also, the pattern of Advanced cadets is much closer to the one for officers than is the pattern of cadets in Basic ROTC.

Summary of Path Analysis Findings

To summarize then, the technique of path analysis was used to gain deeper understanding of the career commitment process among White ROTC-graduate Army officers, Black ROTC-graduate Army officers, cadets in Basic ROTC, and cadets in Advanced ROTC. Empirical models based on the general tentative model of career commitment presented in Chapter 1 were developed and tested. The empirical models were made up of eight variables (nine for the student group) which: (a) spanned the global clusters of the general model; and (b) were picked out by prior bivariate and multivariate analyses as the prime predictors of commitment. The empirical models explained .53 of the variance in commitment for White officers, .40 of the variance in commitment for Black officers, .44 of the variance in commitment of Basic ROTC cadets, and .35 of the variance in commitment of Advanced ROTC cadets.

It was found that:

1. The primary and secondary socialization variables were more highly related to Black officer commitment than to White officer commitment.

2. Job satisfaction was the primary direct cause of commitment among both officer groups, but this variable was more salient in affecting White officers' commitment.

3. Commitment of White officers was to a large extent determined by predispositions present just before entering Army service. Commitment of Black officers, on the other hand, was determined directly by parental encouragement or by experiences occurring while in the Army.

4. For the student ROTC group, satisfaction with the ROTC program did not affect commitment directly but rather indirectly by affecting cadets' expectations about Army life.

5. For the Basic ROTC cadets, motivation for joining ROTC was the prime determinant of commitment. For the Advanced ROTC cadets (already behaviorally committed) high expectations of Army life brought about by their ROTC experiences was the most salient determinant.

6. The value and attitude profile variables-- value set compatible with milita

life, subscription to military ideology, and search for chance to be a leader and for adventure in a job-- were not relevant to the Basic ROTC cadets' commitment but were very relevant to the Advanced ROTC cadets' commitment.

7. On the other hand the remote primary and secondary variables were more important determinants of commitment among the Basic ROTC students than among the Advanced ROTC students.

8. In general, commitment processes of the Advanced cadets were more simila to those of the officer (especially the White officer) group than were the proces of the Basic ROTC students.

CHAPTER 7

TREND ANALYSIS OF VALUES, ATTITUDES, AND JOB IMPORTANCE/ SATISFACTION RATINGS RELEVANT TO CAREER COMMITMENT

Chapter 4 looked at differences in the demographic and socio-psychological profiles of participants and non-participants in the ROTC/Army career path. Chapter 5 focused on participants in the career path and attempted to isolate correlates of participants' commitment to remaining in the career path. Chapter 6 used some assumptions about the causal precedence among the prime predictors isolated in Chapter 5 to develop path models of career commitment among ROTC cadets and young Army officers.

The next two chapters will present additional analyses conducted to investigate the career commitment process, given the available cross-sectional data. A common methodological tool will be used through these chapters, that of using the cross-sectional samples as simulations of a single longitudinal sample, and then noting trends in the belief-attitude-value profile of these cross-sectioned longitudinal groups.

Throughout the discussion the caveat will be made that while the data are analyzed as if they are a single sample analyzed over a period of time, the data are, in fact, several cross-sectional samples subjected to techniques of longitudinal analysis. Thus, conclusions drawn and trends noted should be interpreted with the foregoing constraints in mind. Four major explanations may lie beneath the trend data to be described:

1. The observed trends may be due to the various sample groups getting progressively *older* and more mature. This explanation is the most easily investigated in the present study because of the existence of non-participant comparison groups, at least for the college sample. However, no comparison group exists for the Army data.

2. The observed trends may be due to the different time frame and *socio-political context* in which decisions to join the career path were made for the various sample groups.

3. The observed trends may be due to greater homogeneity in the various sample groups brought about by career path *drop-outs* among deviants from the military mold.

4. The observed trends may be due to *actual changes in the participant group* brought about by the ROTC/Army experience.

Despite the inability to attribute causality to one or more of these sources the data remain interesting and important, because: (a) the trends to be describe provide insight into the changing demographic and socio-psychological profile of participants in the ROTC/Army career, and (b) the trends to be described can be used to generate hypotheses with a firm empirical basis, for further testing in future investigations.

The Army and Non-Army Paths

Data from ROTC college cadets and Army officers made up the Army path. These data were categorized into seven path points made up of seven cross-sectional samples:

- ROTC freshmen
- ROTC sophomores
- ROTC juniors
- ROTC seniors
- Army officers early in their period of obligated service (first year)
- Army officers midway through their period of obligated service
- Army officers late in their period of obligated service (last six months)

Data from non-ROTC college students made up the non-Army path. These data were categorized into four path points made up of four cross-sectional samples:

- non-ROTC freshmen
- non-ROTC sophomores
- non-ROTC juniors
- non-ROTC seniors

Trend Analysis Procedures

Data from three sets of variables were subjected to trend analysis procedures:

- Importance of Personal Values
- Socio-psychological Scale Variables
- Importance/Satisfaction of Job Dimensions in the Army

For each of the three data sets, analyses were made of the data for the seven cross-sectional samples of ROTC college cadets and Army officers and for the four cross-sectional control samples of non-ROTC college students. The trend analysis procedures consisted of:

1. Testing the means of the respective cross-sectional samples for linear, quadratic, and cubic trend relationships as if they were sequential means for a longitudinal sample over the time span involved. Tests for linear, quadratic, and cubic trends were made on Army-path data while tests for only linear and quadratic trends were made for non-Army path data. One reason for the foregoing was that data for seven points were available for the Army-path data but data for only four points were available for the non-Army path. (Hence, no tests for cubic functions.) This procedure identifies variables that show regular patterns of change with time (from point to point on the path).

2. Identifying groups of variables within each set of variables that had similar trend patterns or trend curves. This was done by computing correlation coefficients between the trend means for one variable and the corresponding trend means for other variables. A high correlation coefficient indicates that the trend patterns or shapes of the trend curves for the two correlated variables are similar. The actual plotted curves of the two highly correlated variables, however, may differ considerably with respect to: (1) absolute levels at which the curves are plotted, i.e., one may be in the high ranges and the other in the low ranges, and (2) amount of swing or oscillation of the curves, i.e., the ups and downs of one curve may be small while those for the other may be large. The high correlation does however, indicate that for each successive pair of means for the two variables correlated the shape or slope of the two trend lines or curves are both going up, staying level, or coming down together. Low correlation coefficients suggest that the two trend lines or curves have little or no similarities in shape while negative correlation coefficients suggest that the shapes of the two trend lines or curves are opposite, i.e., while one may be coming down the other is going up and vice versa.

3. Presenting a plot of the trend curve "typical" in shape for the group of variables identified (either a plot of one variable selected for the group or a composite of all variables in the group). The accompanying set of correlation coefficients indicates the degree of similarity between each variable and the trend curve presented for illustrative purposes.

Trend Analysis for Importance of Personal Values

Data for the 14 personal values analyzed in this section came from the respondents completing Section V of the questionnaire (see Appendices A, B, and C). As described in Chapter 4, respondents selected from the list of fourteen values the three values most important to them (in ordered sequence) and the three values least important to them (also in ordered sequence). These data were scored so that a mean importance rating for each value could be calculated for each of the cross-sectional samples. (In computing the means a weight of 7 was assigned each time the variable was selected as most important; 6 as second most important; 5 as third most important; 4 not chosen as the most important or the least important; 3 as third least important; 2 as second least important; and 1 as least important. Thus, the higher the score for any value item, the more important the respondent considered it to be.) Two additional value items were analyzed along with the fourteen from Section V of the questionnaire. These two variables concerned the relative importance of (a) a person's job or family, and (b) the nature of the work done or the quality of the organization for which a person works (see items III-A and III-B of the questionnaire). These two items were scored on a 1 to 5 rating scale with the higher values indicating preference of family over job, and job over organization.

The mean scores and significance of tests for trends (linear, quadratic, and cubic) for the sixteen variables analyzed are reported in Table 7.1 (Army path) and Table 7.2 (non-Army path).

Identification of Significant Trends

Significant linear trends were identified for seven of the sixteen variables for the Army path, all at levels of significance of .01 or greater. Only two of the variables showed significance (at .05 level) for quadratic tests and none of the variables showed significance for cubic tests. For the non-Army path only four variables showed significance for linear tests (three at the .05 level of significance and one at the .01 level of significance). None of the quadratic tests were significant for the non-Army path data.

TABLE 7.1

MEANS FOR TREND ANALYSIS FOR GROUPS ON THE ARMY PATH:

IMPORTANCE OF PERSONAL VALUES

VARIABLE	SIGNIFICANCE OF TREND			GROUP MEANS						
	LINEAR	QUADRATIC	CUBIC	ROTC FROSH	ROTC SOPH	ROTC JR	ROTC SR	ARMY EARLY	ARMY MIDDLE	ARMY LATE
Support	NS	NS	NS	4.53	4.53	4.60	4.18	4.37	4.40	4.43
Conformity	.001	NS	NS	3.23	3.34	3.03	3.29	2.88	2.81	2.84
Recognition	.01	NS	NS	3.90	3.77	3.76	3.91	3.86	4.13	4.14
Independence	NS	NS	NS	4.91	4.85	4.77	4.70	4.89	4.70	4.84
Benevolence	NS	NS	NS	4.33	4.26	4.47	4.26	4.34	4.23	4.12
Leadership	NS	NS	NS	4.13	4.01	4.10	4.23	4.22	4.28	4.13
Patriotism	NS	NS	NS	4.09	4.11	4.03	4.21	4.13	4.16	4.24
Aestheticism	NS	NS	NS	3.05	3.02	3.11	3.04	3.24	2.39	3.22
Religiousness	.001	NS	NS	4.04	4.11	4.02	4.80	3.80	3.71	3.69
Need for Uniqueness	.001	.05	NS	3.48	3.64	3.65	3.43	3.44	3.30	3.07
Equalitarianism	NS	.05	NS	4.17	4.22	4.31	4.42	4.38	4.43	4.27
Acceptance of Authority	NS	NS	NS	3.95	4.01	3.86	3.86	3.90	3.86	3.82
Intellectualism	.01	NS	NS	4.23	4.27	4.25	4.32	4.26	4.44	4.57
Prgamaticism	.001	NS	NS	3.99	3.89	4.05	4.39	4.28	4.57	4.65
Job versus Family	.001	NS	NS	3.63	3.67	3.70	3.65	3.93	3.83	3.93
Type of Work versus Organization	NS	NS	NS	2.27	2.35	2.13	2.31	2.18	2.18	2.13

TABLE 7.2

MEANS FOR TREND ANALYSIS FOR GROUPS ON THE NON-ARMY PATH:
IMPORTANCE OF PERSONAL VALUES

VARIABLE	SIGNIFICANCE OF TREND			GROUP MEANS			
	LINEAR	QUADRATIC	CUBIC	NON-ROTC FROSH	NON-ROTC SOPH	NON-ROTC JR	NON-ROTC SR
Support	NS	NS	NA	4.77	4.50	4.78	4.62
Conformity	NS	NS	NA	2.96	3.08	2.82	2.91
Recognition	.05	NS	NA	3.73	3.58	3.88	3.94
Independence	NS	NS	NA	5.10	5.07	5.15	5.08
Benevolence	.05	NS	NA	4.79	4.84	4.53	4.61
Leadership	NS	NS	NA	3.29	3.42	3.27	3.42
Patriotism	NS	NS	NA	3.86	3.64	3.76	3.69
Aestheticism	NS	NS	NA	3.52	3.65	3.55	3.64
Religiousness	.05	NS	NA	4.43	4.56	4.28	4.20
Need for Uniqueness	NS	NS	NA	3.55	3.53	3.56	3.38
Equalitarianism	NS	NS	NA	4.17	4.26	4.43	4.31
Acceptance of Authority	NS	NS	NA	3.77	3.68	3.63	3.67
Intellectualism	NS	NS	NA	4.23	4.18	4.41	4.35
Pragmaticism	.01	NS	NA	3.86	4.00	3.97	4.20
Job versus Family	NS	NS	NA	3.73	3.71	3.84	3.87
Type of Work versus Organization	NS	NS	NA	2.19	2.14	1.98	2.18

Note. NA = not applicable. Cubic trends were not computed for the non-Army path because there were only four points in the path.

These results suggest that the data for the successive cross-sectional samples for the Army-path show greater consistency for the sixteen value-related variables--i.e., more significant trends identified--than do the data for the successive cross-sectional samples for the non-Army path. This condition is not surprising since one would expect the ROTC/Army samples to be more homogeneous (due to their commitment and participation in ROTC/Army) than the non-ROTC control samples.

Identifying Groups of Variables with Similar Trends

Analyses reported in Chapters 4 and 5 established the positive and negative relationships between the following values and participation in and/or commitment to ROTC/Army:

- Values *positively* related to participation:
  Leadership (L), Patriotism (P), Conformity (C),
  Acceptance of Authority (Au), Recognition (Rg)
- Values *positively* related to commitment:
  Patriotism (P), Leadership (L), Conformity (C),
  Acceptance of Authority (Au)
- Values *negatively* related to participation:
  Aestheticism (Ae), Benevolence (B), Religiousness (Rl),
  Independence (I), Support (S), Equalitarianism (E)
- Values *negatively* related to commitment:
  Aestheticism (A), Independence (I), Religiousness (Rl)

Intercorrelation coefficients were computed for the groups of value variables identified above as being positively and negatively related to participation and/or commitment. Tables 7.3 and 7.4 report these inter-correlation coefficients.

Trends in Values Positively Related to Participation and Commitment

Table 7.3 indicates that the trend patterns or trend curves of Leadership (L), Patriotism (P), and Recognition (Rg) are quite similar in shape (note cluster of positive correlation coefficients above the diagonal, i.e., .40, .74, and .41.) These three value variables have been identified as positively related to participation in and/or commitment to the Army path. They will henceforth be labelled the L-P-Rg Group. Since the study is concerned with the identification and description of variables

TABLE 7.3

INTERCORRELATION COEFFICIENTS FOR TREND PLOTS OF PERSONAL VALUE VARIABLES IDENTIFIED AS POSITIVELY RELATED TO PARTICIPATION AND/OR COMMITMENT

Personal Values	Personal Values[a]				
	C	Rg	L	P	Au
C	[b] / [c]	-.63	-.54	-.23	.65
Rg	-.87		.40	.74	-.60
L	.61	-.20		.41	-.50
P	-.40	.17	-.83		-.46
Au	.42	-.39	-.15	.61	

[a] See discussion page 181 to identify symbols for Personal Value Variables.

[b] Intercorrelation coefficients above diagonal are for the seven cross-sectional samples of the Army path for each pair of variables.

[c] Intercorrelation coefficients below diagonal are for the four cross-sectional samples of the non-Army path for each pair of variables.

TABLE 7.4

INTERCORRELATION COEFFICIENTS FOR TREND PLOTS OF PERSONAL VALUE VARIABLES IDENTIFIED AS NEGATIVELY RELATED TO PARTICIPATION AND/OR COMMITMENT

Personal Values	Personal Values[a]					
	Ae	B	Rl	I	S	E
Ae	[c] [b]	-.45	-.40	.49	-.02	-.01
B	.15		.16	.08	.42	-.05
Rl	.07	.08		-.37	-.51	.15
I	-.73	-.70	-.40		.46	-.74
S	-.97	-.50	-.43	.75		-.70
E	.09	-.35	.41	.65	.17	

[a] See discussion page 181 to identify symbols for Personal Value Variables.

[b] Intercorrelation coefficients above diagonal are for the seven cross-sectional samples of the Army path for each pair of variables.

[c] Intercorrelation coefficients below diagonal are for the four cross-sectional samples of the non-Army path for each pair of variables.

related to participation in and/or commitment to the Army path, the intercorrelation coefficients above the diagonal are used as the primary basis for establishing groupings of variables with similar patterns.

The personal values of Conformity (C) and Acceptance of Authority (Au) are also identified as having similarily shaped trend patterns or trend curves, henceforth, the C-Au Group ($r = .65$).

The correlation coefficients below the diagonal are used to determine whether the groupings based on Army path data are also applicable for the non-Army path. If Army path grouping is verified by non-Army path data, then one might conclude that the similarly shaped trend patterns or trend curves are a characteristic of the population in general (i.e., control group or non-Army path) and not a characteristic exclusively associated with the ROTC/Army path. However, caution needs to be taken in comparing non-Army and Army trend patterns and trend curves. Non-Army trends are based upon *four* identifiable points whereas Army trends are based upon *seven* identifiable points. Thus, the comparisons are for the *four* non-Army points with the corresponding first *four* points of the Army paths.

The non-Army groups (below diagonal data in Table 7.3) to a modest degree (.42) replicated the Army path's grouping for Acceptance of Authority (Au) and Conformity (C). Accordingly this trend similarity may be to a considerable degree a characteristic of the general college population. However, the non-Army path data failed to show the high trend intercorrelations exhibited within the other group of personal values (Recognition, Leadership, and Patriotism). Accordingly these trend groupings can be attributed solely to the Army path samples.

Low positive, zero, and negative correlations can in general be ignored since the primary purpose of the analysis is to identify groups of variables with similarly shaped trend curves and patterns. Low positive, zero, and negative correlations tell one that the trend curves and patterns are not similar.

Trends in Values Negatively Related to Participation and Commitment

The correlation coefficients in Table 7.4 can be used for possible grouping of variables identified as being *negatively* related to participation and/or commitment. Since the variables being analyzed have a negative

relationship to the Army path, the correlation coefficients below the diagonal were used (i.e.,the non-Army data) to group the values. Two groupings emerge. One group is made up of Support (S), Independence (I), and Equalitarianism (E). (Correlation coefficients of .75, .17, and .65.) The second group is composed of Benevolence (B) and Religiousness (R1), where the correlation coefficient is .88. The Aestheticism variable has no substantial positive correlations with any of the other variables.

The data above the diagonal in Table 7.4 (Army path data) lends some support to the groupings and does not suggest other groupings. Support (S) has a correlation coefficient of .46 with Independence (I) but its correlation with Equalitarianism (E) is negative as is the correlation between Independence (I) and Equalitarianism (E). The correlation between Benevolence (B) and Religiousness (R1) is .16 and gives modest support to their grouping for the non-Army data. The other two moderately high coefficients (.49 and .46) link separate pairs which are difficult to explain.

The four variables in Tables 7.1 and 7.2 not organized into groups were not subjected to group analysis (i.e., Need for Uniqueness, Intellectualism, Job versus Family, and Type of Work versus Organization).

Typical Shaped Trend Curves for Groups of Personal Value Variables

Figure 7.1 shows the general shape of the composite trend curves for the two groupings of personal value variables that are positively related to ROTC/Army participation and commitment: L-P-Rg group composed of Leadership (L), Patriotism (P), and Recognition (Rg) variables and C-Au group composed of Conformity (C) and Acceptance of Authority (Au) variables.[12] The trend curves for both groups are linear, with the L-P-Rg group showing an upward slope over time and the C-Au group a downward slope over time. *Thus, personal values become more important over time for Leadership (L), Patriotism (P), and Recognition (Rg) and less important for Conformity (C) and Acceptance of Authority (Au).* The trends for both Army and non-Army data (for the four points for which comparisons can be made) are quite similar.

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[12] The composite curves were constructed by averaging the mean values reported in Tables 7.1 and 7.2 for the respective individual variables in each group.

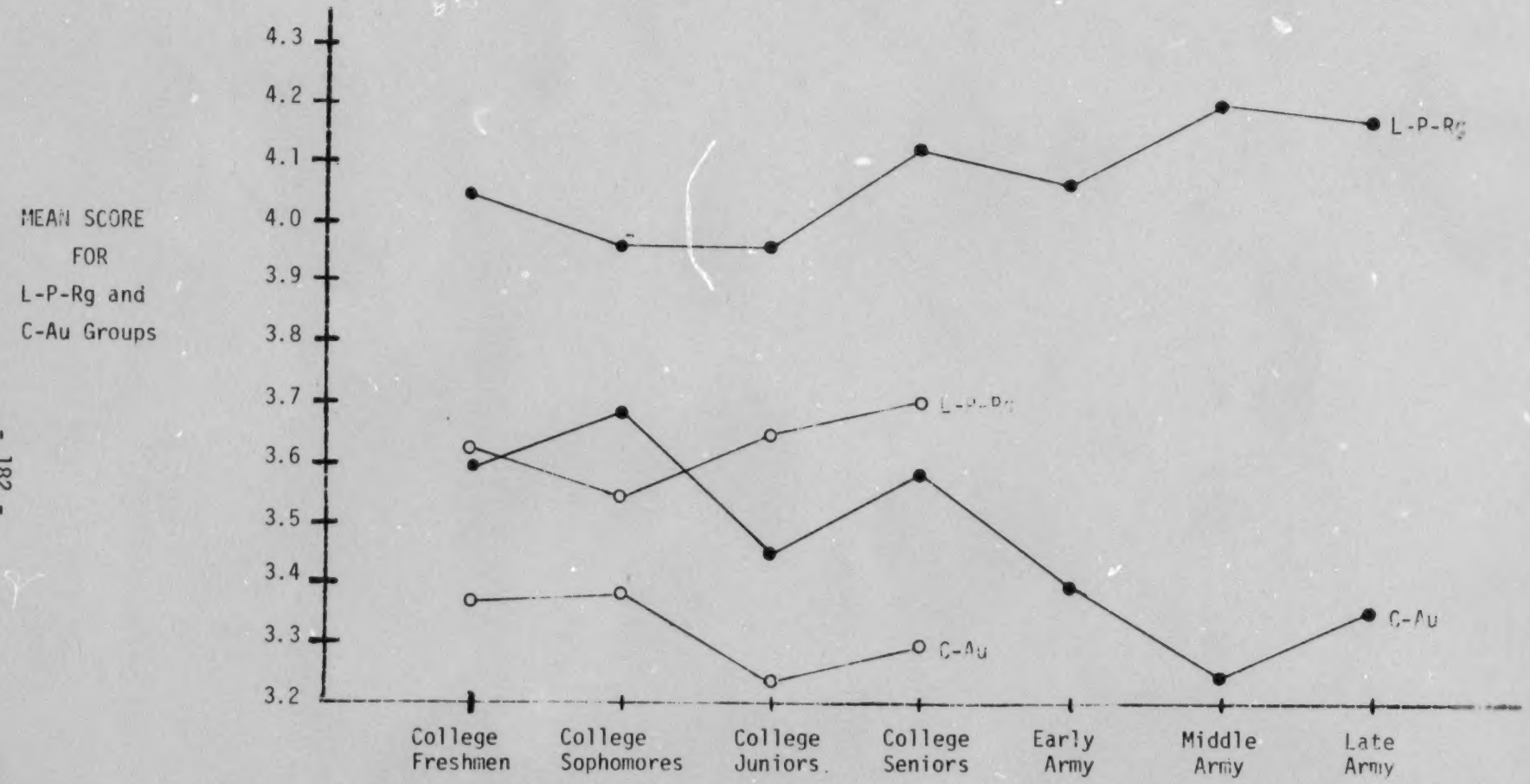

Figure 7.1 COMPOSITE TREND CURVES COMPARING ARMY AND NON-ARMY PATHS FOR GROUPS OF PERSONAL VALUES POSITIVELY RELATED TO ROTC/ARMY PARTICIPATION AND/OR COMMITMENT

The correlation coefficients for each variable in the group with the composite curve, as well as the correlation coefficients between the composite curves for the Army and non-Army groups are as follows:

Correlation Coefficient between L-P-Rg Composite and

	Army Path	Non-Army Path
Leadership (L)	.75	.38
Patriotism (P)	.82	.23
Recognition (Rg)	.94	.96

Correlation Coefficient between C-Au Composite and

	Army Path	Non-Army Path
Conformity (C)	.63	.96
Acceptance of Authority (Au)	.75	.60

Correlation Coefficient between Army Path and Non-Army Path for

L-P-Rg Composite	.76
C-Au Composite	.91

These correlations indicate the extent to which the composite curve is representative of the separate trend curves of the individual variables. The Leadership-Patriotism-Recognition group of variables for the Army path have the greatest homogeneity with respect to the manner in which variables are modified and changed over the time span involved. The correlations between Army and non-Army paths for the composites (.76 and .91) suggest that the two sets of personal values are quite similar in the two population groups (Army and non-Army) and result to a considerable degree from maturation in general.

Figure 7.2 shows the general shape of the composite trend curves for the two groupings of personal value variables that are *negatively* related to ROTC/Army participation and commitment: S-I-E group composed of Support (S), Independence (I), and Equalitarianism (E) variables, and B-R group composed of Benevelence (B) and Religiousness (RI) variables.[13]

The trend curve for the Support-Independence-Equalitarianism (S-I-E) group for the Army path is essentially a straight horizontal line with a slight drop at the college senior level. This drop may be the result of the concern of college seniors for the next phase of their ROTC/Army career.

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[13] The composite curves were constructed by averaging the mean values reported in Tables 7.1 and 7.2 for the respective individual variables in each group.

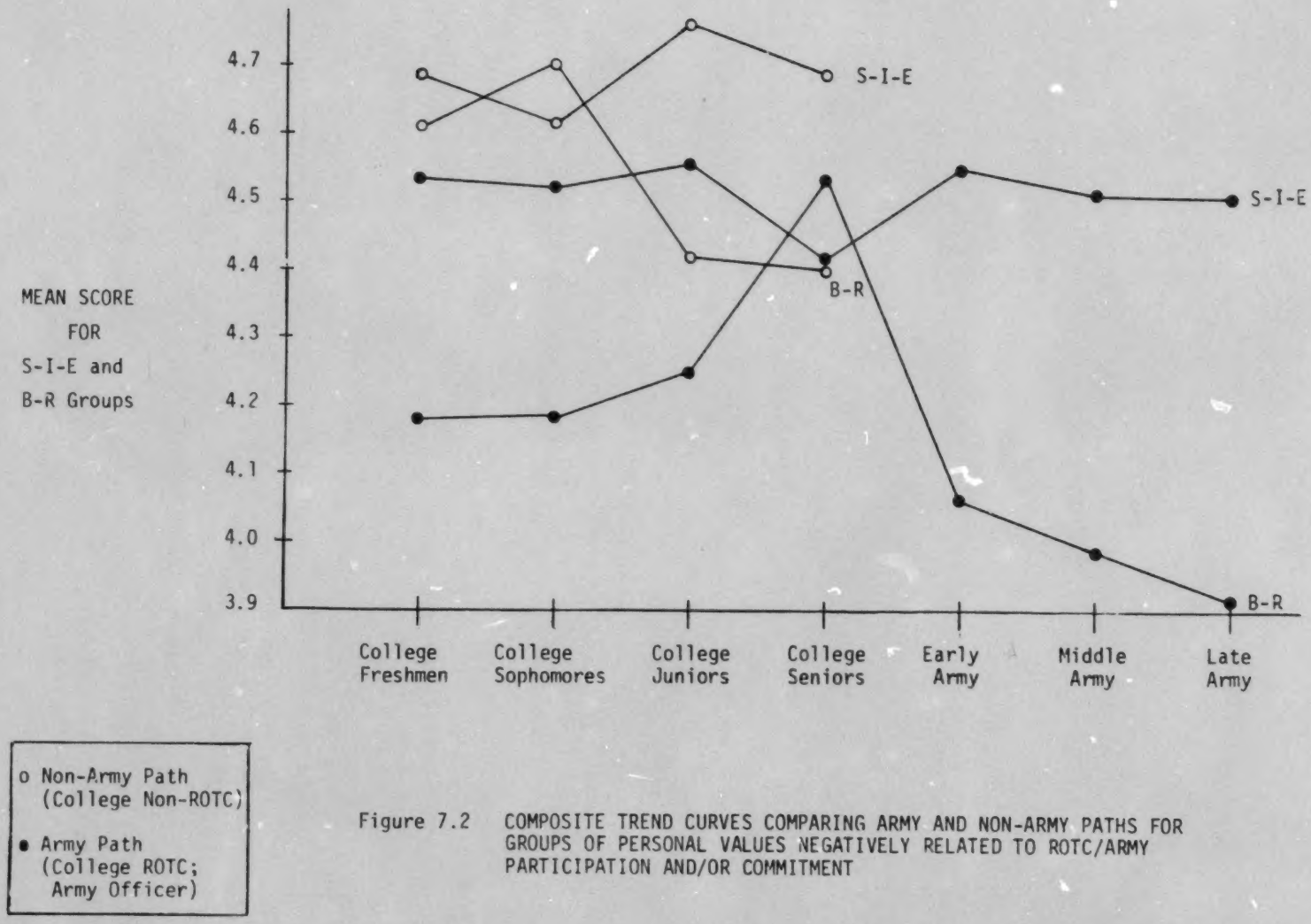

Figure 7.2 COMPOSITE TREND CURVES COMPARING ARMY AND NON-ARMY PATHS FOR GROUPS OF PERSONAL VALUES NEGATIVELY RELATED TO ROTC/ARMY PARTICIPATION AND/OR COMMITMENT

The trend curve for the S-I-E group for the non-Army path is generally horizontal but with alternating ups and downs with a similar drop at the senior year.

The trend curve for the Benevolence-Religiousness (B-R) group for the Army path shows a general decrease from college freshman through late Army with the exception of a large upward peak for college seniors. This is the opposite of the condition found for college seniors for the S-I-E group. The two opposite movements may in fact reinforce one another when the nature of the various personal values are considered. The non-Army path for the B-R group is contrary to the Army path and shows a drop for the junior and senior college years.

The correlation coefficients for each trend curve of each variable in the group with the composite curve, and the correlation coefficients between the composite curves for the Army and non-Army groups are as follows:

Correlation Coefficient between S-I-E Composite and

	Army Path	Non-Army Path
Support (S)	.85	.82
Independence (I)	.62	.97
Equalitarianism (E)	.47	.71

Correlation Coefficient between B-R Composite and

	Army Path	Non-Army Path
Benevolence (B)	.41	.97
Religiousness (RI)	.96	.97

Correlation Coefficient between Army Path and Non-Army Path for

S-I-E Composite	-.67
B-R Composite	-.69

The negative correlations between Army and non-Army paths for the two composites suggest that changes in these two groups of personal values are quite different over time, i.e., the Army environment impacts these groups of personal values in quite a different way than the non-Army environment.

Summary of Findings from Trend Analysis of Personal Value Variables

The major findings of the analysis of the personal value variables were that among personal values identified as positively related to partici-

pation and commitment, Leadership, Patriotism, and Recognition become more important over time while Conformity and Acceptance of Authority become less important. This was true for both the Army and non-Army groups.

Among those variables negatively related to participation and commitment (Support, Independence, Equalitarianism, Benevolence, and Religiousness), there were negative correlations obtained between the Army and non-Army path means. For the college time span, the Army path trend is generally upward (more important) for the B-R variables, and downward (less important) for the non-Army path. For the S-I-E variables, the non-Army path trend is irregular and upward (more important) while for the Army path the trend is linear and somewhat downward (less important).

Trend Analyses for Scale Scores on Socio-Psychological Variables

A second set of variables subjected to trend analysis were the various scale scores computed from sums of items in the questionnarie (the calculation of these scores was explained previously in Chapter 2.) The mean scores for the six attitude variables, the two career development measures, and the ROTC and Army information variables for the Army and non-Army paths are presented in Tables 7.5 and 7.6.

Identification of Significant Trends

Significant linear trends were identified for the Army path for all variables with the exception of Career Development Exploration stage. This variable, however, tested for a significant quadratic trend, made up of a linear upward trend for the college students followed by a drop in the early Army stage and subsequent rise in the later Army stages (a finding which suggests increasing exploration as decision points are approached, which is what Super's career development theory predicts). For the non-Army path, all of the variables showed significant linear trends with the exceptions of the ROTC and Army Information variables.

Identifying Groups of Variables with Similar Trends

The intercorrelation coefficients for the six attitude variables (Attitudes toward ROTC, Attitudes toward Army, Fate Control, Bureaucratic

TABLE 7.5

MEANS FOR TREND ANALYSIS FOR GROUPS ON THE ARMY PATH:

SOCIO-PSYCHOLOGICAL SCALE SCORES

VARIABLE	SIGNIFICANCE OF TREND			GROUP MEANS						
	LINEAR	QUADRATIC	CUBIC	ROTC FROSH	ROTC SOPH	ROTC JR	ROTC SR	ARMY EARLY	ARMY MIDDLE	ARMY LATE
Attitude toward ROTC	.001	NS	.01	97.56	97.03	97.21	94.40	89.49	88.55	87.78
Attitude toward Army	.001	.001	.05	100.33	100.45	102.91	102.28	95.99	95.89	93.90
Fate Control	.001	NS	NS	13.71	14.25	13.66	13.54	13.53	12.99	12.71
Bureaucratic Tendency	.001	NS	.05	23.36	26.79	25.29	24.70	22.82	22.56	21.97
Military Ideology	.001	.001	.05	31.05	31.52	31.74	31.46	29.62	29.32	28.42
Anomy	.001	NS	NS	14.62	14.51	14.11	13.19	13.39	12.05	12.28
Career Development Exploration Stage	NS	.01	.001	41.25	43.15	44.46	45.40	40.65	41.35	42.69
Career Development Establishment Stage	.001	.01	NS	33.27	35.08	37.87	37.91	39.19	39.93	39.29
ROTC Information	.001	NS	NA	13.19	13.21	13.53	13.76	NA	NA	NA
Army Information	.001	NS	NA	10.52	10.84	11.45	11.86	NA	NA	NA

Note. NA = not applicable. The information scales were not included in the Army Officer questionnaire.

TABLE 7.6

MEANS FOR TREND ANALYSIS FOR GROUPS ON THE NON-ARMY PATH:
SOCIO-PSYCHOLOGICAL SCALE SCORES

VARIABLE	SIGNIFICANCE OF TREND			GROUP MEANS			
	LINEAR	QUADRATIC	CUBIC	NON-ROTC FROSH	NON-ROTC SOPH	NON-ROTC JR	NON-ROTC SR
Attitude toward ROTC	.001	NS	NA	85.49	85.13	81.69	81.70
Attitude toward Army	.05	NS	NA	87.03	86.52	86.31	84.27
Fate Control	.01	NS	NA	14.85	14.89	14.09	14.08
Bureaucratic Tendency	.001	NS	NA	24.14	23.40	21.42	22.17
Military Ideology	.001	NS	NA	28.52	27.83	27.34	26.67
Anomy	.001	NS	NA	15.28	14.38	14.25	13.58
Career Development Exploration Stage	.001	NS	NA	39.82	42.03	43.51	44.48
Career Development Establishment Stage	.001	NS	NA	31.60	33.38	33.26	35.74
ROTC Information	NS	.05	NA	12.07	12.39	12.20	12.14
Army Information	NS	NS	NA	9.38	9.90	10.09	10.05

Note. NA = not applicable. Cubic trends were not computed for the non-Army path because there were only four points in the path.

Tendency, Military Ideology, and Anomy) are reported for both the Army path and the non-Army path in Table 7.7. The intercorrelation coefficients are uniformly high for both paths. Thus, the shapes of the trend curves for these six variables are quite similar within paths. This condition indicates that the attitudes underlying the six attitude scales are all modified in relatively similar ways over the time interval of the study, i.e., college freshman through late Army.

The Career Development Exploration Stage trend curve and the Career Development Establishment Stage trend curve have a correlation coefficient of .00 for the Army path and .30 for the non-Army path. However, the correlation coefficient for the two variables for the *college* portion of the Army path is .46. Further, the correlation coefficients between Army and non-Army paths is .99 for the Career Development Exploration Stage and .79 for the Career Development Establishment Stage. Accordingly, these two variables have much the same trend curves for Army and non-Army paths when only the college time span is investigated. However, the variables operate in a much different way for the Army segment of the time span. Caution should be exercised in combining college ROTC and Army data to forecast a trend curve.

The trend curves for the ROTC Information and the Army Information variables have correlation coefficients of .98 for the Army path and -.15 for the non-Army paths. For the college portion of the time span, the trend curves of the Army and non-Army paths have correlation coefficients of -.27 for ROTC Information and .90 for Army Information. *This finding suggests that dissemination of ROTC Information is effective for the Army path group, but not so effective for the non-Army group. Dissemination of Army Information, however, appears much more general since the correlation is high between the trend curves for the Army and non-Army groups.*

Typical Shaped Trend Curves for Socio-Psychological Variables

The intercorrelation coefficients for the six attitude scale score variables were all high (see Table 7.7) so one trend curve may serve to illustrate the shape of the trend curves for all the variables. Figure 7.3 shows the trend curves for the Army and non-Army paths for Attitudes towards the Army. The general pattern for the Army path is for an upward trend from

TABLE 7.7

INTERCORRELATION COEFFICIENTS FOR TREND PLOTS OF SIX ATTITUDE VARIABLES

Attitude	Attitude[a]					
	ROTC	Army	Fate	Bureau.	Ideo.	Anomy
ROTC	[c] / [b]	.91	.88	.79	.94	.91
Army	.71		.72	.79	.98	.70
Fate	.99	.71		.86	.84	.89
Bureau.	.95	.53	.92		.86	.69
Ideo.	.88	.91	.85	.81		.80
Anomy	.91	.93	.93	.81	.99	

[a]Variables in order are: Attitude toward ROTC; Attitude toward Army; Fate Control; Bureaucratic Tendency; Military Ideology; and Anomy.

[b]Intercorrelation coefficients above diagonal are for the seven cross-sectional samples of the Army path for each pair of variables.

[c]Intercorrelation coefficients below diagonal are for the four cross-sectional samples of the non-Army path for each pair of variables.

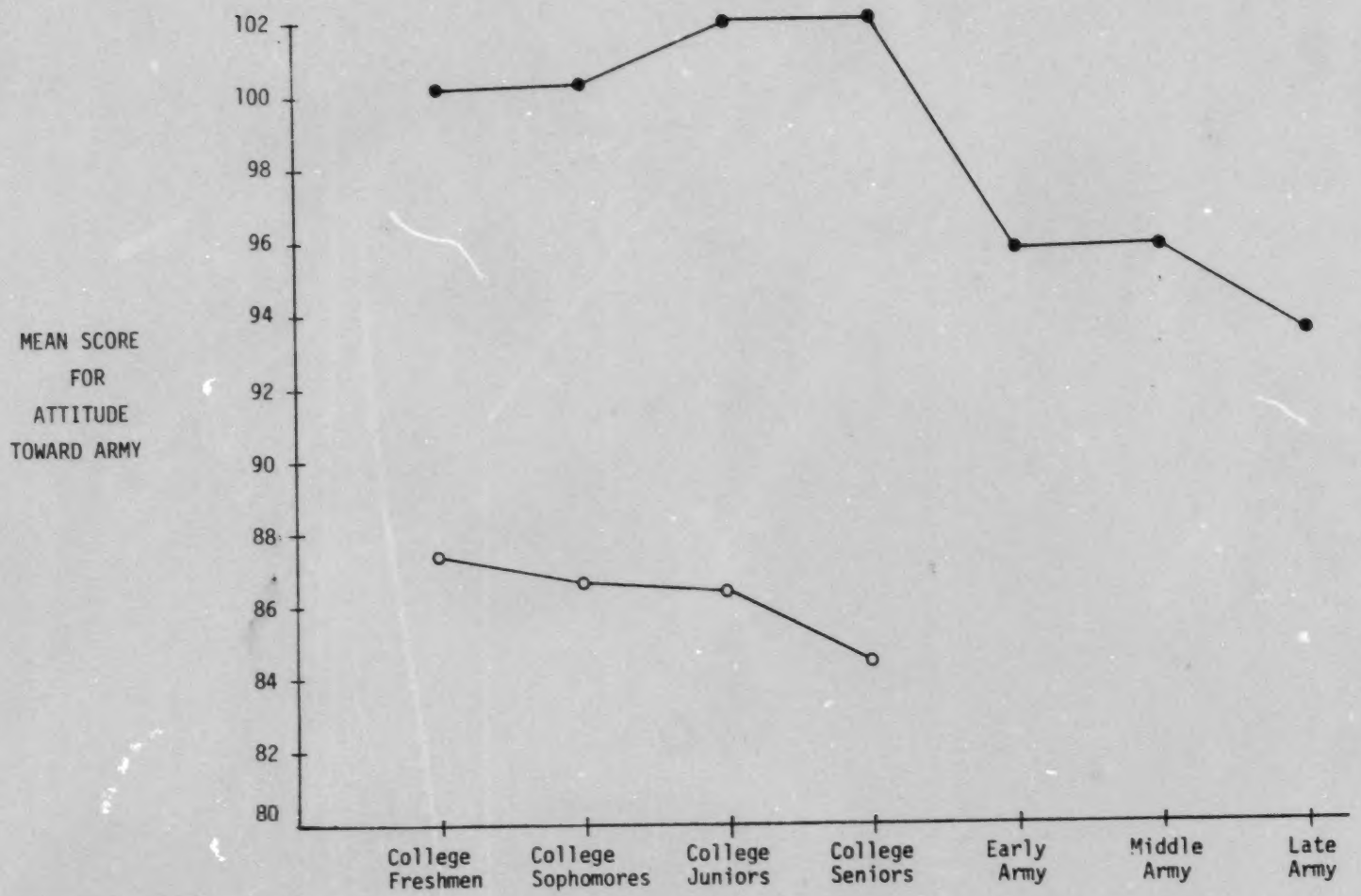

Figure 7.3 TREND CURVE FOR ARMY AND NON-ARMY PATHS FOR ATTITUDE TOWARD ARMY

the college freshman through the college junior years, with a slight drop at the college senior year and a steep drop for early Army through late Army years. The curve is quadratic and suggests that the college ROTC and the Army samples may represent quite different populations with respect to these attitude variables. This condition was discussed earlier in this chapter.

The trend curve for the attitude variables for the non-Army path is, in general, linear with a downward slope form the college freshman through senior years. *Thus, for the time interval represented by college freshmen through college seniors, attitudes for the six variables studied tend to become more favorable for the ROTC sample but less favorable for the non-ROTC control sample.*

Trend plots for the two Career Development variables are presented in Figures 7.4 and 7.5. These plots support earlier discussions pointing out similarities between Army and non-Army paths for the college time interval, with the Army path plot above the non-Army path plot. *This suggests that the commitment/participation of college students to the ROTC program is favorably reflected in the career development variables, with ROTC students being more mature, vocationally speaking, than non-ROTC students.*

Trend Analysis for Importance/Satisfaction of Job Dimensions in the Army

Data were collected for twenty-one job dimensions (see Section III-F of the questionnaire reference) which were evaluated first, regarding their perceived importance with respect to a job, and second, regarding the degree to which satisfaction could be achieved in the Army. Tables 7.8 and 7.9 report the means and trend analysis for the twenty-one job dimensions when rated from the point of view of perceived importance. Table 7.8 presents data for the Army path and Table 7.9 presents data for the non-Army path. Tables 7.10 and 7.11 present similar sets of data when the twenty-one job dimensions are rated with respect to satisfaction in an Army officer job.

Identification of Significant Trends

Table 7.8 shows that, for the Army path, importance ratings for 13 of the 21 job dimension variables were found to have significant linear trends and seven to have significant quadratic trends. Six job dimension variables

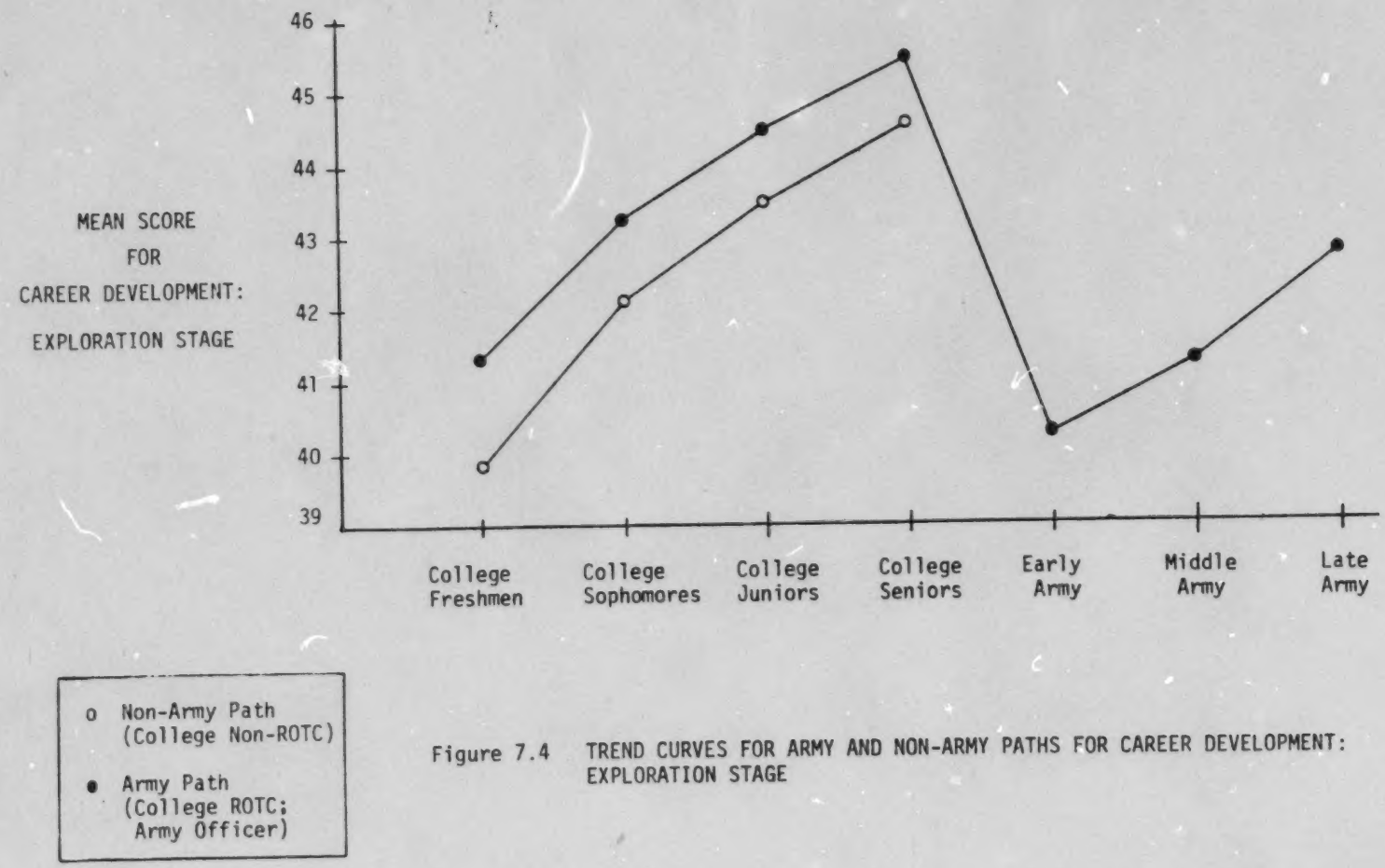

Figure 7.4 TREND CURVES FOR ARMY AND NON-ARMY PATHS FOR CAREER DEVELOPMENT: EXPLORATION STAGE

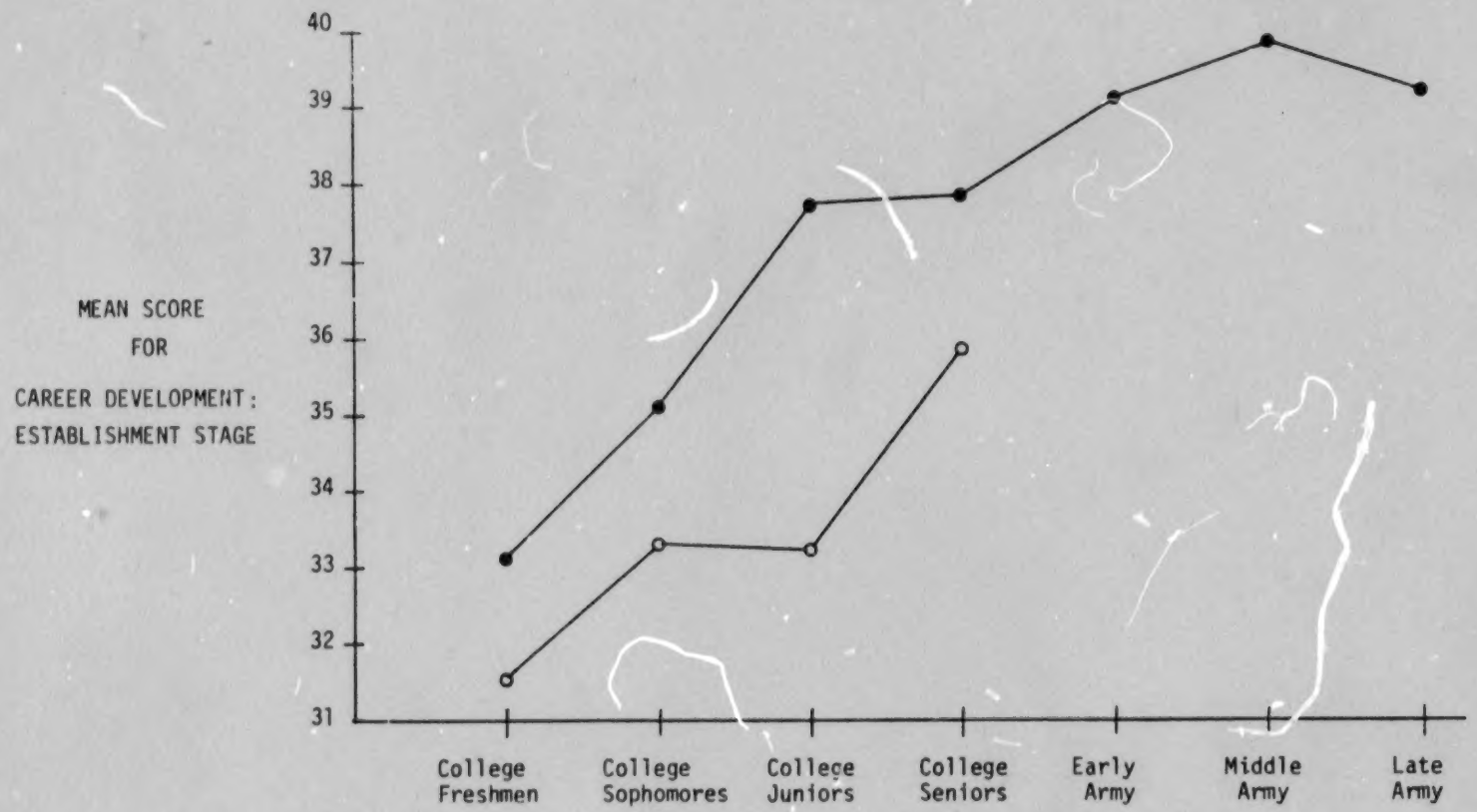

Figure 7.5 TREND CURVES FOR ARMY AND NON-ARMY PATHS FOR CAREER DEVELOPMENT: ESTABLISHMENT STAGE

TABLE 7.8

MEANS FOR TREND ANALYSIS FOR GROUPS ON THE ARMY PATH:

IMPORTANCE OF JOB DIMENSIONS

VARIABLE	SIGNIFICANCE OF TREND			GROUP MEANS						
	LINEAR	QUADRATIC	CUBIC	ROTC FROSH	ROTC SOPH	ROTC JR	ROTC SR	ARMY EARLY	ARMY MIDDLE	ARMY LATE
Salary	.01	NS	NS	1.80	1.79	1.78	1.77	1.90	1.83	1.97
Prestige	NS	NS	NS	2.04	2.01	1.99	1.94	2.04	1.96	2.14
Responsibility	.001	NS	NS	1.66	1.69	1.61	1.57	1.47	1.41	1.42
Interesting People	NS	NS	NS	1.72	1.66	1.63	1.57	1.70	1.68	1.70
Skills	.01	NS	NS	1.74	1.61	1.68	1.69	1.76	1.86	1.86
Contribution to Society	NS	.01	NS	2.03	1.84	1.80	1.87	1.83	1.91	2.02
Geographic Desirability	NS	NS	NS	2.24	2.15	2.13	2.02	2.13	2.13	2.10
More Schooling	.001	.001	NS	2.04	1.92	1.69	1.69	1.60	1.73	1.79
Stability	.01	NS	NS	1.74	1.83	1.68	1.77	1.94	1.97	1.91
Leadership	.01	.001	NS	1.83	1.69	1.56	1.63	1.49	1.62	1.69
Personal Freedom	NS	NS	NS	1.56	1.57	1.52	1.56	1.59	1.58	1.56
Adventure	.05	.05	NS	1.75	1.75	1.66	1.63	1.80	1.84	1.86
Job Security	.001	.01	NS	1.39	1.35	1.30	1.44	1.58	1.62	1.75
Help Others	.001	NS	NS	1.59	1.70	1.46	1.69	1.73	1.76	1.78
Self Improvement and Development	NS	.05	NS	1.39	1.39	1.28	1.32	1.30	1.32	1.40
Quality of Supervisors	.001	NS	NS	1.73	1.64	1.55	1.53	1.52	1.45	1.49
Interesting and Challenging	.05	NS	NS	1.35	1.42	1.33	1.38	1.29	1.32	1.28
Feedback	.001	.01	NS	1.78	1.75	1.49	1.61	1.49	1.54	1.57
Importance of Work	NS	NS	NS	1.57	1.45	1.47	1.58	1.55	1.57	1.60
Family Contentment	.05	NS	NS	1.40	1.52	1.39	1.46	1.63	1.56	1.52
Advancement	NS	NS	NS	1.37	1.34	1.29	1.36	1.41	1.40	1.43

TABLE 7.9

MEANS FOR TREND ANALYSIS FOR GROUPS ON THE NON-ARMY PATH:
IMPORTANCE OF JOB DIMENSIONS

VARIABLE	SIGNIFICANCE OF TREND			GROUP MEANS			
	LINEAR	QUADRATIC	CUBIC	NON-ROTC FROSH	NON-ROTC SOPH	NON-ROTC JR	NON-ROTC SR
Salary	NS	NS	NA	1.96	1.91	1.90	1.93
Prestige	NS	NS	NA	2.26	2.17	2.33	2.21
Responsibility	NS	NS	NA	1.63	1.58	1.74	1.64
Interesting People	NS	NS	NA	1.54	1.48	1.68	1.53
Skills	NS	NS	NA	1.70	1.70	1.67	1.72
Contribution to Society	NS	NS	NA	1.91	1.80	1.96	1.89
Geographic Desirability	NS	NS	NA	2.12	2.11	2.03	2.01
More Schooling	.05	NS	NA	2.27	2.17	2.18	2.02
Stability	NS	NS	NA	1.56	1.57	1.69	1.64
Leadership	.05	NS	NA	2.25	2.20	2.21	2.01
Personal Freedom	NS	NS	NA	1.52	1.43	1.50	1.46
Adventure	NS	NS	NA	1.87	1.92	1.90	1.95
Job Security	NS	NS	NA	1.48	1.57	1.54	1.61
Helping Others	.01	NS	NA	1.52	1.47	1.59	1.70
Self Improvement and Development	NS	NS	NA	1.42	1.37	1.46	1.36
Quality of Supervisors	.01	NS	NA	1.77	1.67	1.58	1.58
Interesting and Challenging	NS	NS	NA	1.40	1.39	1.39	1.39
Feedback	.05	NS	NA	1.80	1.67	1.72	1.59
Importance of Work	NS	NS	NA	1.67	1.74	1.66	1.65
Family Contentment	NS	NS	NA	1.41	1.50	1.46	1.47
Advancement	NS	.05	NA	1.56	1.68	1.67	1.55

Note. NA = not applicable. Cubic trends were not computed for the non-Army path because there were only four points in the path.

TABLE 7.10

MEANS FOR TREND ANALYSIS FOR GROUPS ON THE ARMY PATH:
EXPECTED SATISFACTION OF JOB DIMENSIONS IN THE ARMY

VARIABLE	SIGNIFICANCE OF TREND			GROUP MEANS						
	LINEAR	QUADRATIC	CUBIC	ROTC FROSH	ROTC SOPH	ROTC JR	ROTC SR	ARMY EARLY	ARMY MIDDLE	ARMY LATE
Salary	.001	NS	.001	1.96	1.90	1.82	1.94	2.37	2.30	2.18
Prestige	.001	.001	.05	1.98	1.77	1.80	1.89	2.11	2.28	2.39
Responsibility	.001	.001	.05	1.70	1.58	1.52	1.48	1.87	1.84	1.94
Interesting People	.001	.01	.01	1.80	1.65	1.69	1.75	2.12	2.23	2.31
Skills	.001	.01	.001	1.96	1.80	2.06	2.16	2.88	3.00	3.20
Contribution to Society	.001	.001	.001	2.22	1.97	2.13	2.26	2.78	2.98	3.16
Geographic Desirability	.001	.001	.01	2.48	2.24	2.17	2.30	2.69	2.77	2.96
More Schooling	.001	.001	.001	1.89	1.78	1.57	1.71	2.27	2.53	2.64
Stability	.001	.001	.001	2.53	2.33	2.32	2.36	3.09	3.32	2.82
Leadership	.001	.001	.05	1.50	1.46	1.31	1.45	1.60	1.76	1.78
Personal Freedom	.001	.05	.01	2.36	2.18	2.34	2.35	2.83	2.98	2.96
Adventure	.001	.05	.001	1.61	1.53	1.41	1.58	1.92	2.03	1.93
Job Security	.001	.05	.001	1.53	1.51	1.46	1.69	2.07	2.30	2.27
Help Others	.001	NS	.05	1.79	1.73	1.78	1.92	2.13	2.19	2.23
Self Improvement and Development	.001	.01	.001	1.54	1.51	1.44	1.61	2.07	2.20	2.24
Quality of Supervisors	.001	.001	.05	1.81	1.73	1.78	1.91	2.39	2.69	2.90
Interesting and Challenging	.001	.001	NS	1.60	1.58	1.58	1.68	2.12	2.36	2.59
Feedback	.001	.001	.001	1.80	1.66	1.53	1.69	2.39	2.46	2.61
Importance of Work	.001	.05	.001	1.68	1.60	1.58	1.84	2.31	2.46	2.42
Family Contentment	.001	.001	.05	1.95	1.84	1.93	2.07	2.40	2.65	2.82
Advancement	.001	.001	.001	1.48	1.35	1.40	1.44	2.07	2.40	2.48

TABLE 7.11

MEANS FOR TREND ANALYSIS FOR GROUPS ON THE NON-ARMY PATH: EXPECTED SATISFACTION OF JOB DIMENSIONS IN THE ARMY

VARIABLE	SIGNIFICANCE OF TREND			GROUP MEANS			
	LINEAR	QUADRATIC	CUBIC	NON-ROTC FROSH	NON-ROTC SOPH	NON-ROTC JR	NON-ROTC SR
Salary	NS	NS	NA	2.27	2.08	2.18	2.22
Prestige	NS	NS	NA	2.27	2.29	2.31	2.43
Responsibility	NS	NS	NA	2.03	2.09	1.99	2.16
Interesting People	.01	NS	NA	1.95	1.95	2.05	2.21
Skills	NS	NS	NA	2.13	2.09	2.24	2.27
Contribution to Society	NS	NS	NA	2.38	2.46	2.41	2.64
Geographic Desirability	NS	NS	NA	2.50	2.57	2.64	2.64
More Schooling	NS	NS	NA	2.21	2.15	2.17	2.09
Stability	NS	NS	NA	2.48	2.62	2.59	2.63
Leadership	NS	NS	NA	1.99	2.08	1.97	1.99
Personal Freedom	NS	NS	NA	2.45	2.56	2.53	2.58
Adventure	NS	NS	NA	1.98	2.01	1.90	2.02
Job Security	NS	NS	NA	1.69	1.59	1.63	1.60
Helping Others	NS	NS	NA	2.09	2.12	2.11	2.26
Self Improvement and Development	NS	NS	NA	1.94	2.06	1.98	2.04
Quality of Supervisors	NS	NS	NA	2.10	2.29	2.08	2.20
Interesting and Challenging	NS	NS	NA	2.05	2.10	2.03	2.17
Feedback	NS	NS	NA	2.07	2.02	2.02	2.12
Importance of Work	NS	NS	NA	2.05	2.23	2.11	2.26
Family Contentment	NS	NS	NA	2.19	2.32	2.21	2.30
Advancement	NS	NS	NA	1.71	1.83	1.72	1.80

Note. NA = not applicable. Cubic trends were not computed for the non-Army path because there were only four points in the path.

had neither significant linear nor quadratic trends. They were the variables labeled as Prestige, Interesting People, Geographic Desirability, Personal Freedom, Importance of Work, and Advancement. In contrast, for the non-Army path, significant trends were observed for only five variables with sixteen showing no significant trends. *Thus, for the Army path data, trends are much more evident than for the non-Army path data. This condition is probably due to the fact that the Army path group is much more homogeneous than the non-Army path group with respect to the job dimension variables.*

The distinction between the two groups is much more striking when the twenty-one job dimensions are analyzed with respect to Army job satisfaction. For the Army path every variable has a significant linear trend with all but two also showing significant quadratic trends. For the non-Army group only one significant linear or quadratic trend was identified for the twenty-one job dimension variables. The Army path group as a whole appears to have a relative homogeneous concept of the way in which Army life fulfills job expectations.

Identifying Groups of Variables with Similar Trends

As pointed out in the previous section most of the trends for the twenty-one job dimension variables were significant for the Army path while only a very few were found significant for the non-Army path. For the job dimension variables the scale is inverted, that is, low scores are associated with desirable results: the lower a score the greater the perceived importance of that dimension and the more satisfied that dimension would be in the Army.

The job dimensions rated for importance formed four groups for Army path data, each with a distinctive trend curve. The non-Army path data were heterogenous with respect to trends and could not be classified into groups. This condition is not surprising because the non-Army path group is composed of a diverse group with widely different interests with respect to jobs and job environments. Their only common characteristic is that they are students not in ROTC.

The first group of job dimension variables (Group A) with similar trends for importance ratings is composed of the following variables:

Contribution to Society (CS)
More Schooling (MS)
Leadership (L)
Self Improvement and Development (SID)
Feedback (F)

A common attribute underlying this group of variables appears to be self-awareness of the individual for his own self development, and integration with his social environment. Table 7.12 presents the intercorrelations among the trend characteristics for these variables. These correlations are in a respect, a validity coefficient indicating the degree to which the trend characteristics of these job dimension variables are alike.

Figure 7.6 for More Schooling-Importance illustrates the typical trend curve for the first group's variables. The rating scale is inverted so that a low score implies more importance. *The trend is for variables in this group to be rated as more important for the period from College Freshmen through Early Army and then to become less important at the end of the Army period.*

The second group of job dimension variables (Group B) rated for importance is composed of the following ten variables:

Salary (SA)
Prestige (P)
Interesting People (IP)
Skills (SK)
Stability (ST)
Personal Freedom (PF)
Help Others (HO)
Importance of Work (IW)
Family Contentment (FC)
Advancement (A)

The underlying characteristic of this group of variables appears to be factors associated with the job itself (as opposed to characteristics of the person in Group A).

Table 7.13 presents the intercorrelation coefficients for the trend curve characteristics for the ten variables forming Group B. The coefficients are all positive with 16 r's .70 or above, 10 within the range of .50 to .70, 12 within the range .30 to .50 and 7 below .30. This group of variables does not have as much homogeneity as Group A but then factors associated with a job is a more complex grouping characteristic.

TABLE 7.12

INTERCORRELATION COEFFICIENTS FOR TREND PLOTS OF FIVE JOB DIMENSIONS FORMING GROUP A[a] RATED FOR IMPORTANCE FOR ARMY PATH

JOB DIMENSIONS	JOB DIMENSIONS			
	MS	L	SID	F
CS	.60	.79	.67	.44
MS		.94	.82	.92
L			.81	.86
SID				.87
F				

[a]Contribution to Society (CS), More Schooling (MS), Leadership (L), Self Improvement and Development (SID), and Feedback (F).

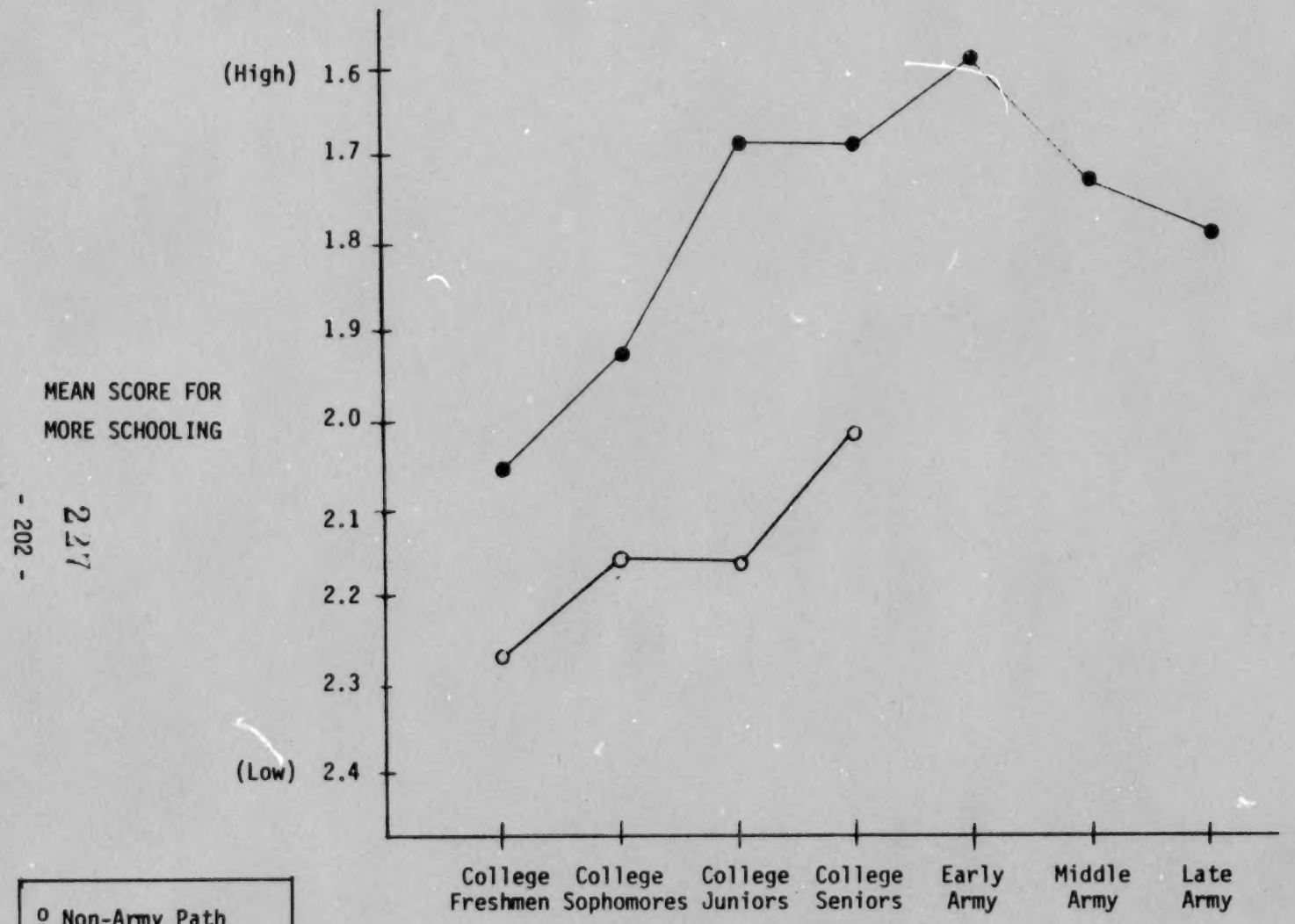

FIGURE 7.6 TREND CURVES FOR COMPARING ARMY AND NON-ARMY PATHS FOR MORE SCHOOLING - IMPORTANCE

TABLE 7.13

INTERCORRELATION COEFFICIENTS FOR TREND PLOTS OF TEN JOB DIMENSION VARIABLES FOR GROUP B[a] RATED FOR IMPORTANCE FOR ARMY PATH

JOB DIMENSIONS	JOB DIMENSIONS								
	P	IP	SK	ST	PF	HO	IW	FC	A
SA	.83	.58	.71	.68	.30	.63	.51	.58	.79
P		.80	.40	.30	.18	.23	.30	.64	.47
IP			.28	.52	.26	.17	.15	.29	.54
SK				.66	.38	.52	.72	.48	.70
ST					.82	.88	.43	.49	.84
PF						.82	.47	.78	.77
HO							.53	.80	.70
IW								.30	.83
FC									.70

[a]Salary (SA), Prestige (P), Interesting People (IP), Skills (SK), Stability ST), Personal Freedom (PF), Help Others (HO), Importance of Work (IW), Family Contentment (FC), and Advancement (A).

Figure 7.7 presents the trend curve for Helping Others which is a representative variable for Group B. *The characteristic trends are irregularity for the college period with higher importance ratings at entry ROTC points (freshman and junior years) and lower importance ratings during the following year (sophomore and senior). During the Army period the ratings tend to be given less importance with succeeding years.* This trend is not unlike enthusiasm at the start when there is newness and a tapering off with time.

The third group of job dimension variables (Group C) is made up of the following three variables:

Responsibility (R)
Quality of Supervision (QS)
Interesting and Challenging Job (IC)

The underlying characteristic of this group appears to be the specific job's relationship to the organization as a whole, i.e., the interesting and challenging characteristics of the job along with its associated responsibilities and alignment with the supervisory structure above it.

Table 7.14 presents the intercorrelation coefficients for these three variables. The correlations are substantial indicating that ratings for these three variables across time are quite similar.

Figure 7.8 presents the trend curve with respect to time for Quality of Supervision-Importance. The curve is essentially linear with the variables rated as more important across the time span. In Table 7.8 these three variables -- Responsibility, Quality of Supervision, and Interesting and Challenging Job -- showed significance for the linear test but non-significance for the quadratic test.

The fourth group of job dimension variables (Group D) is composed of the following three variables:

Geographic Desirability (GD)
Adventure (AV)
Job Security (JC)

The underlying characteristic of this group of variables appears to involve an emotional characteristic. Table 7.15 reports the intercorrelation coefficients among the variables. Two are in a medium range (.32 for GD and AV; .43 for GD and JC); one is substantial (.80 for AV and JC).

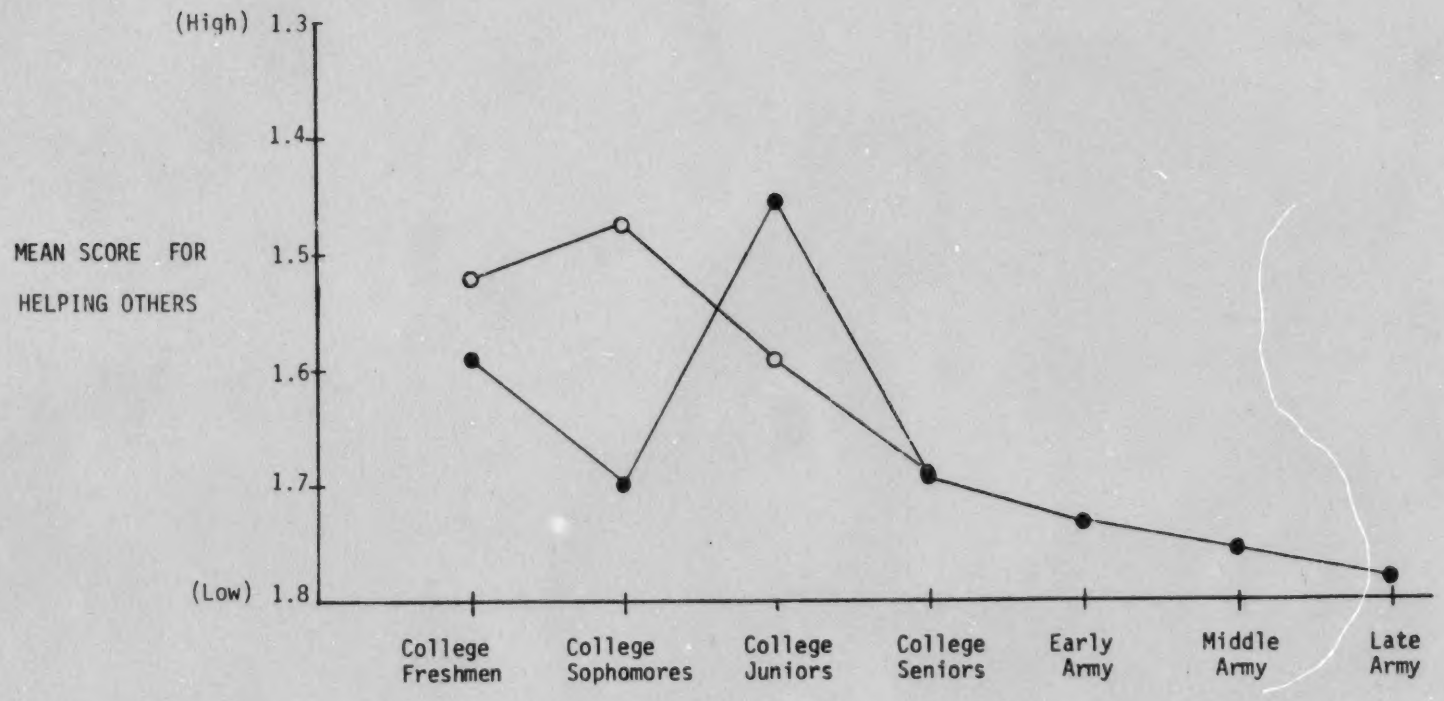

Figure 7.7 TREND CURVE FOR ARMY AND NON-ARMY PATHS FOR HELPING OTHERS--IMPORTANCE

TABLE 7.14

INTERCORRELATION COEFFICIENTS FOR TREND PLOTS OF THREE JOB DESCRIPTIONS FOR GROUP C[a] RATED FOR IMPORTANCE FOR ARMY PATH

JOB DIMENSIONS	JOB DIMENSIONS	
	QS	IC
R	.86	.80
QS		.55

[a]Responsibility (R), Quality of Supervision (QS), and Interesting and Challenging (IC).

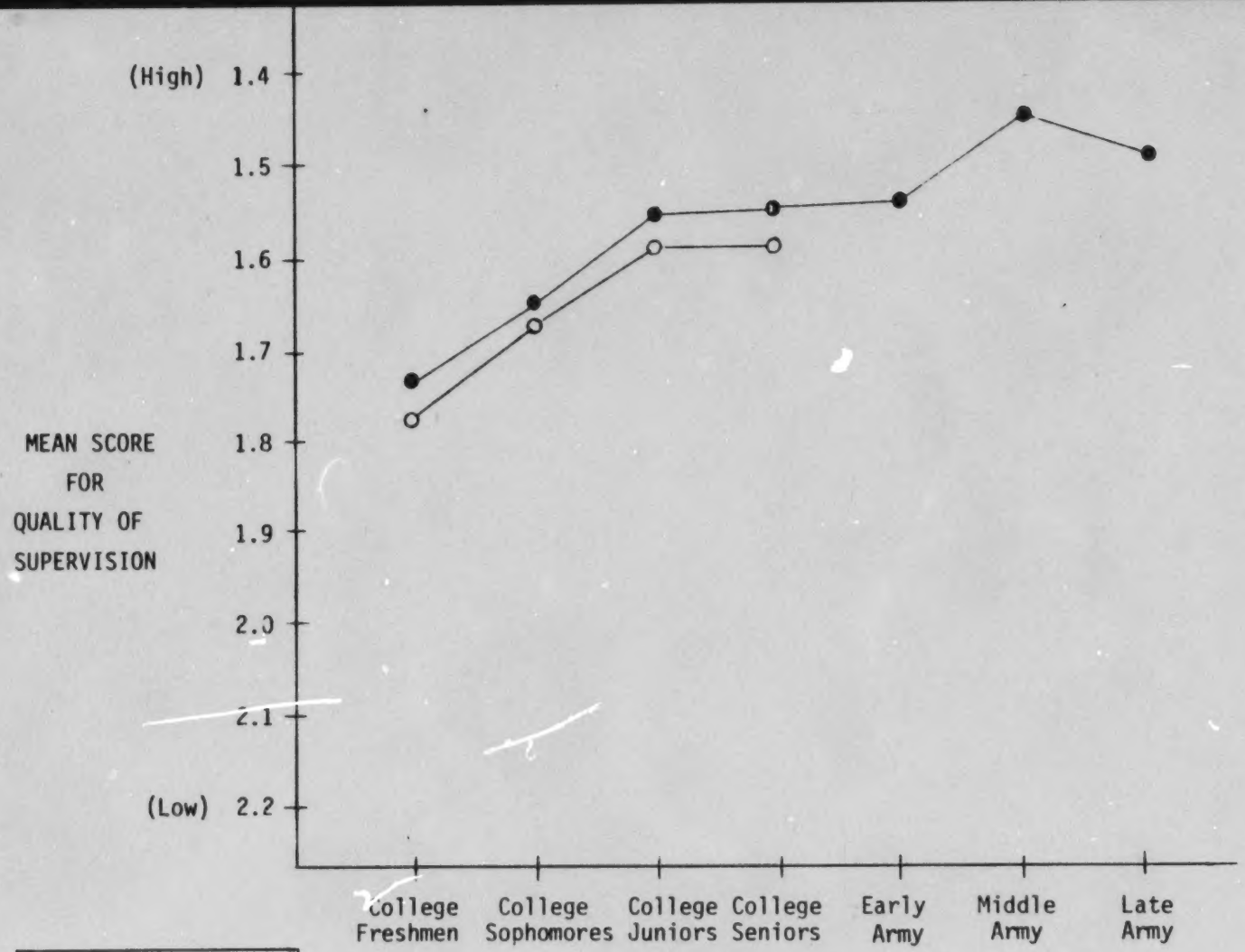

FIGURE 7.8 TREND CURVES FOR COMPARIING ARMY AND NON-ARMY PATHS FOR QUALITY OF SUPERVISION - IMPORTANCE

TABLE 7.15

INTERCORRELATION COEFFICIENTS FOR TREND PLOTS OF THREE JOB DIMENSIONS FOR GROUP D[a] RATED FOR IMPORTANCE FOR ARMY PATH

JOB DIMENSIONS	JOB DIMENSIONS	
	AV	JC
GD	.32	.43
AV		.80

[a]Geographic Desirability (GD), Adventure (AV), and Job Security (JC).

Figure 7.9 presents the trend curve for the Adventure-Importance variable which is illustrative for this group. The trend is to rate the variable as more important from the college freshman through the college senior time span. Through the Army years these variables become less important with time.

The 21 job dimensions when rated with respect to *expected or actual satisfaction in the Army* form one rather homogeneous group with the *same trend characteristic for the Army path.* Evidence of this condition comes from Table 7.10 where all 21 variables showed significant tests for linear trends and all but two also tested significant with respect to quadratic trend. In general, the trends were all of a single general shape. Evidence for this is contained in the following set of correlations between the Feedback-Satisfaction variable (selected as the illustrative curve, Figure 7.10) and the other 20 variables.

Salary	$r = .85$	Adventure	$r = .97$
Prestige	$r = .86$	Job Security	$r = .97$
Responsibility	$r = .87$	Help Others	$r = .95$
Interesting People	$r = .98$	Self Improvement and Development	$r = .99$
Skills	$r = .96$	Quality of Supervisors	$r = .97$
Contribution to Society	$r = .97$	Interesting and Challenging	$r = .97$
Geographic Desirability	$r = .97$	Importance of Work	$r = .96$
More Schooling	$r = .99$	Family Contentment	$r = .96$
Stability	$r = .88$	Advancement	$r = .98$
Leadership	$r = .95$		
Personal Freedom	$r = .97$		

Figure 7.10 is the trend curve for the Feedback-Expected Satisfaction in Army which is illustrative of the trend curve for all these variables. As was pointed out in discussion of previous trend curves, the trend curves of the other variables may differ in many ways from the curve given to illustrate trend shape. Curves for other variables may be at a higher or lower range on the scale; may tend to be flat or stretched out, etc.. However, all will have the same characteristic shape. *The trend shape shows increased satisfaction for the college freshman through college junior time span with a reversal at the senior year, i.e., somewhat lower expectations of satisfaction.* At the senior year many things may be competing for the attention of the individual. *Over the Army time span there is a general decrease in the degree of actual satisfaction.* This trend may reflect the typical drop in enthusiasm that one perceives with developing age.

The trend data for the non-ROTC path revealed no significant linear or quadratic trends for any of the job dimension variables when rated for expected satisfaction.

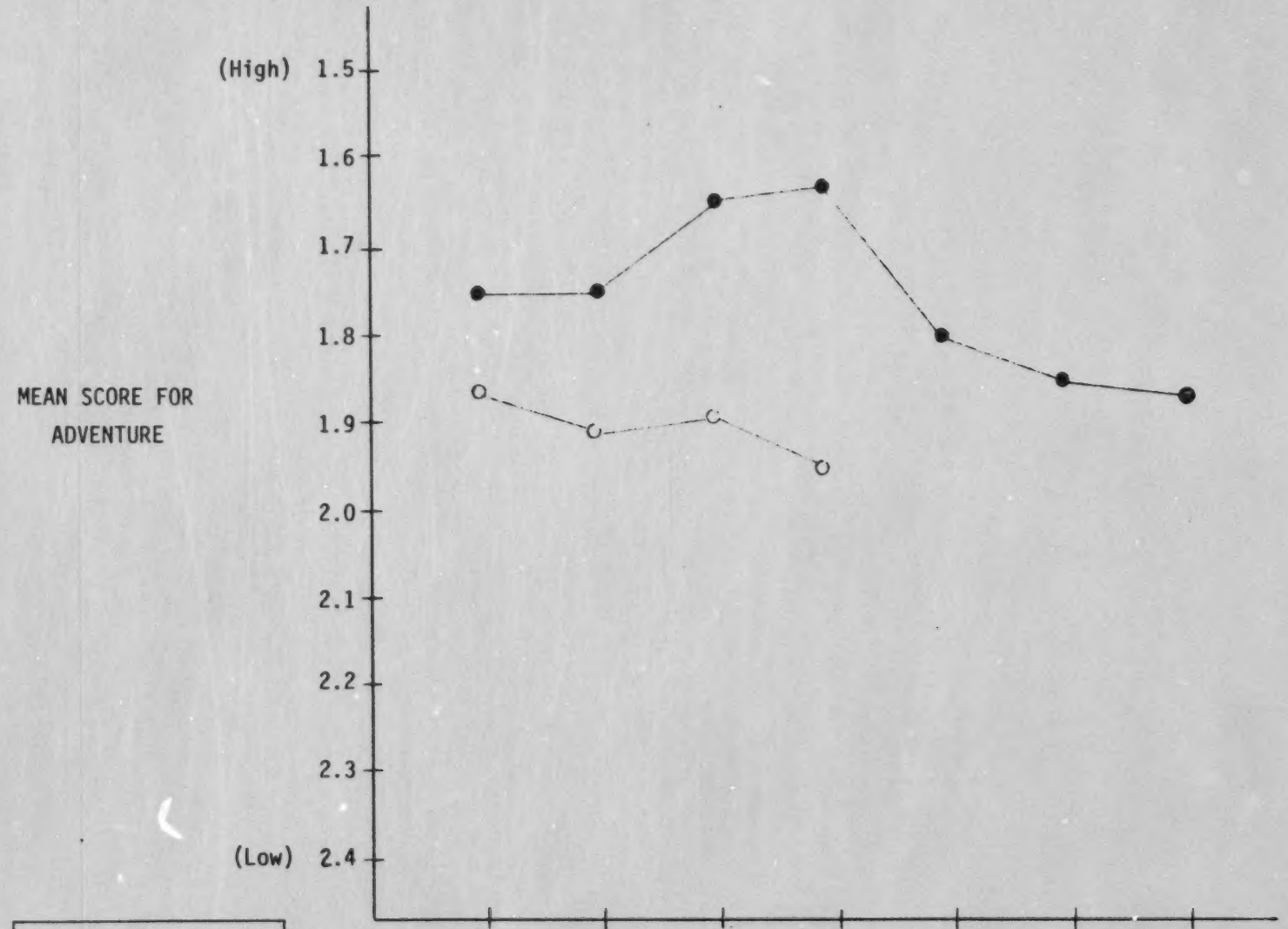

FIGURE 7.9 TREND CURVES FOR COMPARING ARMY AND NON-ARMY PATHS FOR ADVENTURE - IMPORTANCE

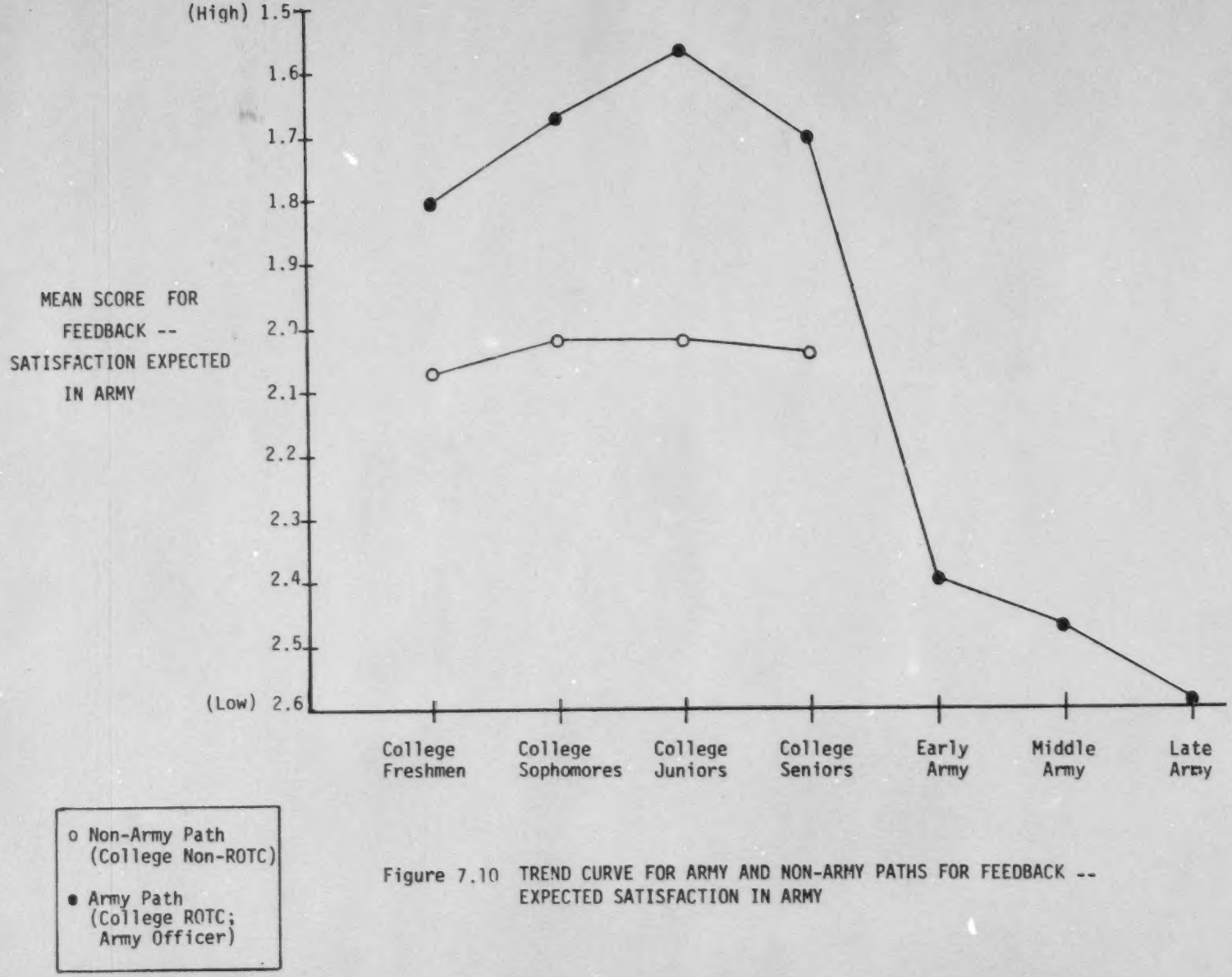

Figure 7.10 TREND CURVE FOR ARMY AND NON-ARMY PATHS FOR FEEDBACK -- EXPECTED SATISFACTION IN ARMY

Summary

The most significant finding from analysis of values, attitudes and job importance and satisfaction ratings relevant to career commitment was that substantially more significant trends were identifiable for the Army path data than for the non-Army path data. This condition was true for each set of variables studied. As pointed out at the beginning of this chapter the data on which the trends were computed were cross-sectional in nature, and thus do not establish the *cause* of these results. They may be due to selection/drop-out precesses, to actual changes in ROTC/Army participants brought about by the ROTC/Army environm or to a combination of both these mechanisms.

Another major finding was that, while the college ROTC and Army samples wer consistent within themselves, trends obtained across these two sets of cross-sectional samples were difficult to explain in many instances (i.e., the college ROTC data were very different from the Army officer data, despite the fact that these two groups were part of the same career path). This suggests that social-political-economic conditions at the time the Army samples were recruited for RO may have produced a group of individuals substantially different with respect to values, attitudes and job satisfaction concepts held by the current samples of ROTC individuals. Further work should be undertaken to evaluate ROTC and Army career participation and commitment against the social-political-economic environment at the time of entry.

With respect to the Personal Value variables the following significant trends were identified:

1. Leadership (L), Patriotism (P), and Recognition (Rg)[14] show a trend of becoming increasingly more important with time for both the Army and non-Army paths.

2. Conformity (C) and Acceptance of Authority (Aa)[14] show a trend of becoming increasingly less important with time for both the Army and non-Army paths.

3. The common trends identified for personal values with respect to Support (S), Independence (I), and Equalitarianism (E)[15] were opposite for

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[14] All values positively related to ROTC/Army participation and commitment (see Chapters 4 and 5).

[15] All values negatively related to ROTC/Army participation and commitment (see Chapters 4 and 5).

the Army and non-Army paths, with the non-Army path being irregular (up and down from point to point) and the Army path being relatively consistent across time.

4. The common trends identified for Benevolence (B) and Religiousness (R1) were opposite for the Army and non-Army paths, with the non-Army path showing decreasing importance across time and the Army path showing increasing in importance over the college time span followed by decreasing importance over the Army time span.

With respect to the Socio-Psychological variables the following significant trends were identified:

1. The six attitude variables--Attitudes towards ROTC, Attitudes towards the Army, Need for Fate Control, Bureaucratic Tendency, Subscription to Military Ideology, and Anomy--all showed the same trend with respect to time. The trend curve for the Army path was upward (increasing importance/favorability of attitudes) over the college time span, followed by a downward swing (decreasing importance/favorability of attitudes) over the Army time span. The trend curve for the non-Army path was linear downward (decreasing importance/favorability of attitudes) over the college time span. For all six attitudes, the trend line for the Army path was above that of the non-Army path, indicating that the attitudes are indeed salient to military career decision-making.

2. Analysis of the trends for Career Development (Exploration and Establishment stages) revealed significant upward (desired performance) linear trends for both Army and non-Army paths over the college time span. The trend curve for the Army path was above (superior performance) the trend curve for the non-Army path in all cases.

With respect to the Job Dimension variables rated for *importance*, the following major results were obtained:

1. Few significant trends and no common trend patterns were identified for the variables with respect to the non-Army path data.

2. A common trend pattern for the Army path was identified for five job dimension variables: Contribution to Society (CS), More Schooling (MS), Leadership (L), Self Improvement and Development (SID) and Feedback (F). The common attribute underlying this group appears to be self-awareness of the individual for his own self development and integration with his social environment. The trend is for the variables in this group to be rated as more important over the college-early Army period and then to become less important at the end of the Army period.

3. A second common trend pattern for the Army path was identified for ten job dimension variables: Salary (SA), Prestige (P), Interesting People (IP) Skills (SK), Stability (ST), Personal Freedom (PL), Help Others (HO), Importance of Work (IW), Family Contentment (FC) and Advancement (A). The common attribute associated with this set of variables appears to be factors associated with the nature of the job itself. The trend curve characteristic for this set of variables is irregular for the college time span and decreasing importance over the Army time span. Another characteristic is that high points in the trend can be associated with entry points into phases of programs (freshman ROTC, junior ROTC and early Army) where orientation instruction is frequently given.

4. A third common trend pattern for the Army path was identified for three job dimension variables: Responsibility (R), Quality of Supervision (QS) and Interesting and Challenging Job (IC). The underlying characteristic for this group appears to be the relationship of the job to the organization of which it is a part. The common trend curve is linear across time with the variable being rated as more important across time.

5. A fourth common trend pattern for the Army path was identified for three job dimension variables: Geographic Desirability (GD), Adventure (AV) and Job Security (JC). The underlying characteristic for this loosely connected group of variables appears to be a personal emotional characteristic. The trend is to rate the variables as more important through the college freshman-college junior time span with a decrease in importance at the college senior year that continues through the Army time span.

With respect to the Job Dimension variables rated for *satisfaction*, the following major results were obtained:

1. Only one significant linear or quadratic trend was obtained for the non-Army group.

2. The 21 job dimensions exhibited similar trend characteristics for the Army group: increasing expected satisfaction for the college freshman through college junior time span, with a reversal (lower expected satisfaction) at the college senior year, followed by a general decrease in actual satisfaction through the Army time span.

Future research can look into the extend to which these obtained trends are attributable to actual changes in career path participants brought about by exposure to the ROTC and Army programs.

CHAPTER 8

ADDITIONAL CROSS-SECTIONAL COMPARISONS: THE FACTORIAL STRUCTURE OF BELIEFS ABOUT ROTC/ARMY; THE EFFECTS OF PROCEDURAL VARIABLES ON COMMITMENT

The previous chapter used the statistical tool of trend analysis to analyze the present study's cross-sectional data in a simulated longitudinal design. This chapter will continue these cross-sectional comparisons using two new data analytic methods: (a) *factor analysis* of Beliefs about ROTC[16] and Beliefs about the Army[17] held by the various cross-sectional samples; and (2) *multiple discriminant function analysis* of individual items from the career commitment scale using various procedural or program-related determinants of commitment, such as possession of an ROTC scholarship and time of entry into ROTC, as independent variables. A second group of independent variables--race, sex, and father's education--were included in the statistical design as control variables, in order that their effect could be partialled out in assessing the effect of the procedural variables on commitment.

Factor Analysis of Beliefs about ROTC and Beliefs about the Army

The 26 Beliefs about ROTC and 28 Beliefs about the Army items were factor analyzed[18] separately for the high school, college and Army samples, with the goal of examining the changing belief factor-structure across the cross-sectional groups. It is to the results of these successive factor analyses that the discussion now turns. First, results of the factor analysis of Beliefs about ROTC for the high school, college and Army samples will be discussed. Then results of the factor analysis of Beliefs about the Army for the

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[16] See Section IV-A of the high school student and Army officer questionnaires; Section IV-B of the college student questionnaire.

[17] See Section IV-B of the high school student and Army officer questionnaires; Section IV-C of the college student questionnaire.

[18] Using orthogonal varimax factor analysis.

same three groups will be presented. Finally, structural changes in Beliefs about ROTC and Beliefs about the Army across the three samples will be pointed out.

Factor Analysis of Beliefs about ROTC

Perceptions of ROTC among high school students. Factor analysis of the 26 Beliefs about ROTC items among high school students revealed the existence of two coherent factors having eigenvalues greater than 1.00. The first factor, labeled *Potential for Occupational- and Self-Development* (eigenvalue 6.65), accounted for 67.9% of the variance, with thirteen items having loadings greater than .40. The items, shown in Table 8.1, had loadings ranging from .42 to .74 and suggest that high school students perceive ROTC as providing personal and occupational growth via (a) the availability of leadership experience, (b) the possibility of developing an awareness of one's own goals and values, (c) the potential for challenge, and (d) the opportunity to develop job-related skills and interests. Other perceived opportunities afforded participants in ROTC include fulfillment of patriotic duty, obtaining better civilian employment, etc.

A second factor derived from this analysis, *Personal and Social Costs of ROTC Participation*, had an eigenvalue of 1.65 and accounted for 16.9% of the predictable variance. As illustrated in Table 8.2, four items made meaningful contributions to this factor and were concerned with the degree to which ROTC involved mickey-mouse and irrelevant details, the length of ROTC time commitments (either in immediate terms vis-a-vis time while in college or in longer range terms relating to service commitment to the Army) and social costs incurred because close friends or relatives would not be or are not pleased about the individual's participation in ROTC.

Perceptions of ROTC among college students. Factor analysis of the same 26 ROTC Belief items for the college student sample resulted in the emergence of two coherent factors having eigenvalues greater than 1.00. The first factor, accounting for 65% of the common variance, had an eigenvalue of 6.16. This factor, labeled *Potential for Self-Development*, had five items with loadings greater than .40 as shown in Table 8.3. These items were largely concerned

TABLE 8.1

PERCEPTIONS OF ROTC PARTICIPATION AMONG HIGH SCHOOL STUDENTS--ITEMS LOADING ON FACTOR OF POTENTIAL FOR OCCUPATIONAL- AND SELF-DEVELOPMENT

Items	Factor Loadings
ROTC helps students gain experience and ability as a leader.	.74
ROTC helps students develop an awareness of personal goals and values.	.71
ROTC provides challenges for the individual.	.69
ROTC helps students develop self-discipline of mind and body.	.66
ROTC helps one develop job-related skills and interests.	.66
The ROTC curriculum/materials are of good quality.	.60
ROTC is excellent training for an Army officer position.	.59
Military service helps one fulfill a patriotic duty.	.57
ROTC cadets are competent.	.55
ROTC helps one get a better civilian job than one could otherwise obtain.	.50
Being a member of ROTC is a great way to earn money while going to college	.46
ROTC instructors are competent.	.45
ROTC provides a means for having a good time before settling down.	.42

TABLE 8.2

PERCEPTIONS OF ROTC AMONG HIGH SCHOOL STUDENTS--ITEMS LOADING ON FACTOR OF PERSONAL AND SOCIAL COSTS OF ROTC PARTICIPATION

Items	Factor Loadings
ROTC involves too much mickey-mouse and too many irrelevant details.	.65
ROTC requires too much time while in school.	.60
ROTC leads to a military commitment that is too long.	.54
Someone close to me (girlfriend/boyfriend, spouse, parent) does not (would not) like my being in ROTC.	.41

TABLE 8.3

PERCEPTIONS OF ROTC AMONG COLLEGE STUDENTS--ITEMS LOADING ON FACTOR OF POTENTIAL FOR SELF-DEVELOPMENT

Items	Factor Loadings
ROTC helps students develop an awareness of personal goals and values.	.68
ROTC helps students develop self-discipline of mind and body.	.65
ROTC helps students gain experience and ability as a leader.	.65
ROTC provides challenges for the individual.	.63
The ROTC curriculum/materials are of good quality.	.45

with the potential of ROTC for providing an increasing awareness of one's personal goals and values, enhanced self-discipline, the provision of leadership experience, and individual challenge.

The second factor, *Personal Costs of ROTC Participation*, had an eigenvalue of 1.29 and accounted for 13.6% of the predictable variance, with four items having substantial loadings (as illustrated in Table 8.4). These items suggest that college students assess the costs of ROTC in particularly personal terms including: (a) requiring too much time while in school, (b) an overemphasis on discipline, (c) too much emphasis on mickey-mouse and irrelevant sorts of activities, and (d) a military commitment that is too long.

Perceptions of ROTC among Army officers. Factor analysis of the 26 items using Army officer data revealed the existence of three factors having eigenvalues greater than 1.00. The first of these factors was labeled *Potential for Occupational- and Self-Development* and accounted for 55.9% of the predictable variance (eigenvalue = 5.18). As illustrated in Table 8.5, nine items had substantial loadings on this factor (i.e., factor loadings greater than .40). Among these items a number were concerned with the degree to which ROTC provides challenges for the individual, enables students to become more self-disciplined, provides leadership experience and helps develop job-related skills and interests.

The second factor derived from this analysis was labeled *Personal Costs of ROTC Participation* and accounted for 14.3% of the common variance (eigenvalue 1.33). This factor may be described in terms of five items having loadings greater than .40 (as shown in Table 8.6). These items were concerned with perceptions regarding overemphasis on discipline, lack of relevance associated with drill, the involvement of too much mickey-mouse and irrelevant details, and the amount of time ROTC requires, both during college and in terms of the individual's commitment to the Army.

Finally, the third factor, accounting for 11.5% of the variance (eigenvalue 1.07), was described in terms of *Positive Personal Interactions*. This factorial dimension had three items with substantial loadings, as illustrated in Table 8.7; these were concerned with the ease with which one could get along with ROTC instructors, the competence of those instructors and the ease with which one could get along with ROTC cadets.

TABLE 8.4

PERCEPTIONS OF ROTC AMONG COLLEGE STUDENTS--ITEMS LOADING ON FACTOR OF PERSONAL COSTS OF ROTC PARTICIPATION

Items	Factor Loadings
ROTC requires too much time while in school.	.58
Discipline is overemphasized in ROTC.	.58
ROTC involves too much mickey-mouse and too many irrelevant details.	.56
ROTC leads to a military commitment that is too long.	.54

TABLE 8.5

PERCEPTIONS OF ROTC AMONG ARMY OFFICERS--ITEMS LOADING ON FACTOR OF POTENTIAL FOR OCCUPATIONAL- AND SELF-DEVELOPMENT

Items	Factor Loadings
ROTC provides challenges for the individual.	.71
ROTC helps students develop self-discipline of mind and body.	.69
ROTC helps students gain experience and ability as a leader.	.68
ROTC is excellent training for an Army officer position.	.60
ROTC helps students develop an awareness of personal goals and values.	.56
The ROTC curriculum/materials are of good quality.	.53
ROTC cadets are competent.	.47
ROTC helps one develop job-related skills and interests.	.46
ROTC involves too much mickey-mouse and too many irrelevant details.	-.41

TABLE 8.6

PERCEPTIONS OF ROTC AMONG ARMY OFFICERS--ITEMS LOADING ON FACTOR OF PERSONAL COSTS OF ROTC PARTICIPATION

Items	Factor Loadings
Discipline is overemphasized in ROTC.	.62
ROTC requires too much time while in school.	.48
Drill is not relevant to being a good officer.	.46
ROTC involves too much mickey-mouse and too many irrelevant details.	.42
ROTC leads to a military commitment that is too long.	.40

TABLE 8.7

PERCEPTIONS OF ROTC AMONG ARMY OFFICERS--ITEMS LOADING ON FACTOR OF POSITIVE PERSONAL INTERACTIONS

Items	Factor Loadings
ROTC instructors are easy to get along with.	.72
ROTC instructors are competent.	.52
ROTC cadets are easy to get along with.	.49

Factor Analysis of Beliefs about the Army

To obtain a picture of perceptions and expectations regarding the Army and Army life, a series of factor analyses were undertaken on the twenty-eight items tapping attitudes toward the Army. These factor analyses were again undertaken separately for each of the three samples addressed in the investigation (i.e., high school seniors, college students and Army officers). The results of these analyses are presented below.

Perceptions of the Army among high school students. Two factorial dimensions were sufficient to describe the bulk of the variance associated with perceptions of the Army among high school students. These two dimensions (eigenvalues of 4.71 and 2.64 respectively) accounted for a total of 75.5% of the common variance. The first factor from this analysis, accounting for 48.3% of the variance, was labeled *Positive Qualities of Army Life*. Items having substantial loadings on this factor (loadings of .40 and above) are illustrated in Table 8.8 and reveal that the Army is perceived in terms of the quality of its officers, its ability to help personnel become more self-disciplined, the respect accorded officers, the sense of direction that it gives people, the utility of training for civilian life and the opportunity for travel.

A second factor derived from the analysis accounted for 27.2% of the variance, and was concerned with *Depersonalizing Aspects of Army Life*. This factor was comprised of ten items having substantial loadings (as shown in Table 8.9). These items suggest a dimension that portrays some negative and difficult attributes of the Army including perceptions concerned with the amount of freedom that people have on the job, the perception that everyone in the Army must be alike, difficulties associated with having sufficient privacy, problems associated with making close friendships, and problems with the amount of freedom that people have in their personal lives. This theme is a familiar one (cf. Glickman, Goodstadt, Korman & Romanczuk, 1973; Goodstadt, Frey & Glickman, 1975), and underlines the importance of the individual's sense of autonomy and fate control within the organizational milieu. Thus, for high school students, the human need for fate control, privacy and close friendship ties are most salient when they consider the Army and life in the Army.

TABLE 8.8

PERCEPTIONS OF THE ARMY AMONG HIGH SCHOOL STUDENTS--ITEMS LOADING ON FACTOR OF POSITIVE QUALITIES OF ARMY LIFE

Items	Factor Loadings
I am impressed by the quality of officers in the Army.	.67
The Army helps its people develop self-discipline of mind and body.	.65
The Army officer is held in high respect by the majority of my friends.	.59
The Army officer is held in high respect by the general public.	.59
The Army helps give many people a sense of direction.	.58
The training one gets in the Army is useful in civilian life.	.49
The opportunity to travel is one of the rewarding aspects of Army life.	.43
Army officers typically get along well with their supervisors.	.40

TABLE 8.9

PERCEPTIONS OF THE ARMY AMONG HIGH SCHOOL STUDENTS--ITEMS LOADING ON FACTOR OF DEPERSONALIZING ASPECTS OF ARMY LIFE

Items	Factor Loadings
The Army does not give its people enough freedom on the job.	.56
In the Army, everyone must be alike.	.55
It is hard to get satisfactory privacy in the Army.	.53
Close friendships are not made easily in the Army.	.52
Army officers' only contact with their subordinates is giving them orders.	.51
The Army does not give its people enough freedom in their personal lives.	.51
There is something immoral about being part of the military.	.49
Discipline is inconsistently applied in the Army.	.49
It is hard to make really good friends in the Army.	.42
One encounters greater prejudice in the Army than in civilian life.	.41

Perceptions of the Army among college students. A factor analysis of items pertaining to perceptions of the Army was next carried out on the college student data. Two key factors, accounting for 80.3% of the common variance, were identified as important dimensions of perceptions of the Army among the college student group. The first factor, having an eigenvalue of 6.56 and accounting for 61.8% of the variance, was labeled *Loss of Personal Control and Individuality*. Six items (as illustrated in Table 8.10) loaded on this factor. The items were primarily concerned with the amount of freedom the Army permits people to have in terms of their personal lives, difficulties associated with getting sufficient privacy, the amount of freedom individuals are permitted on the job, the overemphasis on discipline, and difficulties related to leading a normal family life and expressing one's individuality. This first factor provides an additional indication that personal control and autonomy are quite salient in terms of the individual's perception of Army officers and the Army environment.

A second factor emerging from this analysis had an eigenvalue of 1.97 and accounted for 18.5% of the common variance. This factor may be described in terms of a dimension of *Positive Qualities of Army Life*, with six items having substantial loadings on the factor (items are illustrated in Table 8.11). These items were concerned with the respect accorded Army officers by the general public and by the individual's peers, the extent to which the Army helps people to become more self-disciplined and to gain a sense of self-direction, and the usefulness of Army training for civilian life.

Perceptions of the Army among Army officers. Factor analysis of Beliefs about the Army held by Army officers yielded three coherent factorial dimensions which, in total, accounted for 76.4% of the common variance. The first factor, *Positive Qualities of Army Life*, had an eigenvalue of 5.33 and accounted for 48.9% of the variance. As indicated in Table 8.12, five items had substantial loadings on this factor and were concerned with the perception that the Army helps people to develop self-discipline, provides people with a sense of direction, has good quality officers and provides training and fringe benefits that are comparable to those obtainable in civilian life.

The second factor, *Loss of Personal Control and Individuality*, is illustrated by five items having substantial loadings as shown in Table 8.13. This

TABLE 8.10

PERCEPTIONS OF THE ARMY AMONG COLLEGE STUDENTS--ITEMS LOADING ON THE FACTOR OF LOSS OF PERSONAL CONTROL AND INDIVIDUALITY

Items	Factor Loadings
The Army does not give its people enough freedom in their personal lives.	.64
It is hard to get satisfactory privacy in the Army.	.64
The Army does not give its people enough freedom on the job.	.60
Discipline is overemphasized in the Army.	.53
Because of constant mobility, it is hard to lead a normal family life in the Army.	.44
In the Army, everyone must be alike.	.43

TABLE 8.11

PERCEPTIONS OF THE ARMY AMONG COLLEGE STUDENTS--ITEMS LOADING ON FACTOR OF POSITIVE QUALITIES OF ARMY LIFE

Items	Factor Loadings
The Army officer is held in high respect by the general public.	.62
The Army helps its people develop self-discipline of mind and body.	.62
The Army officer is held in high respect by the majority of my friends.	.60
I am impressed by the quality of officers in the Army.	.59
The Army helps give many people a sense of direction.	.44
The training one gets in the Army is useful in civilian life.	.43

TABLE 8.12

PERCEPTIONS OF THE ARMY AMONG ARMY OFFICERS--ITEMS LOADING ON FACTOR OF POSITIVE QUALITIES OF ARMY LIFE

Items	Factor Loadings
The Army helps its people develop self-discipline of mind and body.	.61
The Army helps give many people a sense of direction.	.59
I am impressed by the quality of officers in the Army.	.46
The training one gets in the Army is useful in civilian life.	.45
The fringe benefits of an Army job are hard to beat in civilian jobs.	.40

TABLE 8.13

PERCEPTIONS OF THE ARMY AMONG ARMY OFFICERS--ITEMS LOADING ON FACTOR OF LOSS OF PERSONAL CONTROL AND INDIVIDUALITY

Items	Factor Loadings
The Army does not give its people enough freedom in their personal lives.	.60
It is hard to get satisfactory privacy in the Army.	.50
Because of constant mobility, it is hard to lead a normal life in the Army.	.48
Living arrangements are better in the Army that in civilian life.	-.41
Recreation and entertainment are better in the Army than in civilian life.	-.40

factor accounted for 16% of the variance and had an eigenvalue of 1.74. The five items were concerned with perceptions of the Army in terms of its provisions for enough personal freedom in the individual's personal life, difficulties associated with obtaining sufficient privacy, problems related to leading a normal family life, and the comparative quality of living arrangements and recreational opportunities in the Army and in civilian life.

Finally, perceptions of the Army among Army officers were describable in terms of a third factorial dimension, *Patriotic Contribution of Army Service*. This last dimension accounted for 11.4% of the variance (eigenvalue = 1.24) and is represented by two items as shown in Table 8.14. These items were concerned with the perception that people in the Army do more for their country and contribute more than civilians. Thus, in these terms, this factor is indicative of the individual's perception that Army service represents a fulfillment of one's patriotic duty and that Army personnel provide substantial contributions to the nation's welfare in the course of their service.

Examination of Structural Changes Across the Samples

Changes in perceptions of ROTC. The major change in perceptions of ROTC across the cross-sectional groups lies in the increasing differentiation and specificity of the ROTC image held by college students as opposed to high school students. Tables 8.1 through 8.4 show that the perceptions of ROTC held by high school students were two-dimensional, one dimension encompassing *Potential for Occupational- and Self-Development*, the second encompassing *Personal and Social Costs of ROTC Participation*. Somewhat similiar though clearly more differentiated dimensions emerged from the factor analysis of perceptions of ROTC among college students. Two dimensions were identified in this analysis: *Potential for Self-Development* and *Personal Costs of ROTC Participation*.

As shown in Table 8.1, the factor of *Potential for Occupational- and Self-Development* (high school students) was comprised of 13 items that had factor loadings greater than .40; these items ranged from "gain experience

TABLE 8.14

PERCEPTIONS OF THE ARMY AMONG ARMY OFFICERS--ITEMS LOADING ON FACTOR OF PATRIOTIC CONTRIBUTION OF ARMY SERVICE

Items	Factor Loadings
In general, people in the Army do more for their country than civilians.	.89
Army people contribute to their country more than civilians.	.80

and ability as a leader" and "develop job-related skills and interests" (representing the occupational domain), to "provide a means of having a good time" and "develop self-discipline of mind and body" (representing a self-development perspective). These 13 items may be contrasted with the five items (Table 8.3) having high loadings on the factor of *Potential for Self-Development* identified in the college sample. These latter items are concerned primarily with ROTC as an aid to self-development (i.e., developing self-discipline, providing challenge for the individual, increasing awareness of personal goals and values, etc.), with little emphasis on the occupational attributes of the ROTC experience.

Items loading on the factor of *Personal and Social Costs of ROTC Participation* among high school students are presented in Table 8.2. The four items having high loadings on this factor encompass perceptions of ROTC in terms of its emphasis on mickey-mouse and irrelevant details, the time required while in school, the length of one's military commitment and the low regard in which ROTC is held by those who are close to the individual. This factor may be contrasted with the factor *Personal Costs of ROTC Participation* evident in the college sample. The four items loading on this latter factor are illustrated in Table 8.4 and are nearly identical to the items loading on the analogous factor from the high school sample, except that the social cost of ROTC (i.e., the low regard with which others view ROTC participation) is no longer as salient, and has been replaced by an item concerned with overemphasis on discipline in ROTC.

To recapitualate then: moving from the high school to the college sample, one finds some degree of change in the structure of perceptions regarding the Army ROTC program, particularly in terms of the perceived "rewards" of ROTC participation. High school students tend to have a more global view, with ROTC seen as a vehicle for both occupational- and self-development. Among the more mature and experienced college students, however, the most salient attributes of the ROTC program are perceived principally in the self-development domain to the exclusion of occupational concerns. It may be that the increased exposure to and awareness of ROTC among college students provides them with some indication regarding the program's limitations in terms of enhancing

occupational development. Alternatively, college students may have a somewhat more narrow and articulated view of their career directions than high school students and, as a consequence, no longer view the kinds of experiences offered by ROTC as being particularly relevant in an occupational sense.

Perceptions of "costs associated with ROTC participation" also appeared to undergo change over the course of the career development process. Thus, such costs are initially (i.e., in high school) perceived in personal and social terms, with concerns expressed about the feelings that others significant to the individual have regarding participation in ROTC. The perceptions of college students are somewhat different, with lower salience attached to others' feelings about ROTC.

The potential biasing influences that may serve to alter "true" outcomes of this analysis (i.e., longitudinally derived results) must be mentioned again at this point: the structural changes apparent in the above factor analyses may be a function of: (a) self-selection factors as a function of student entrance into or subsequent attrition from college, and/or of (b) generational differences wherein the perceptions of different generations of students varies as a function of cultural or historical change. Despite such possibilities, the heuristic value of these findings lies in providing directions for future longitudinal analysis revolving around the nature and determinants of structural change as a consequence of the career commitment process and career-related experience.

Changes in perceptions of the Army. A similar major finding emerges when one compares perceptions of the Army across the cross-sectional groups: perceptions of the Army get increasingly differentiated and specific as one moves from the high school to the college to the Army officer groups.

Among high school students, two dimensions were sufficient to characterize perceptions of the Army: *Positive Qualities of Army Life* and *Depersonalizing Aspects of Army Life*. Items having substantial loadings on these factors are exhibited in Tables 8.8 and 8.9.

Factor analysis of items assessing perceptions of the Army among college students indicated that two factors predominate, *Loss of Personal Control and Individuality* (items are shown in Table 8.10) and *Positive Qualities of Army Life* (items may be found in Table 8.11).

A parallel factor analysis of data gathered from the Army officer sample indicated that officers' perceptions of the Army were most parsimoniously

described along three dimensions including: (a) *Positive Qualities of Army Life*, (b) *Loss of Personal Control and Individuality*, and (c) *Patriotic Contribution of Army Service*. Items having substantial loadings on these three factors are exhibited in Tables 8.12, 8.13, and 8.14, respectively.

Examining the patterns of factor loadings across the high school, college, and officer samples, the findings regarding structural change are quite evident. First, it is apparent that moving from high school students to college students, the importance of "fate control" or the degree of personal control accorded the individual, has increased markedly in salience. Thus, among high school students, *Depersonalizing Aspects of Army Life* appeared as a factor accounting for 27% of the common variance and was comprised of a number of fate-control-linked items that subsequently appeared in the college student analysis as *Loss of Personal Control and Individuality*. This latter factor accounted for 80% of the variance in the college sample analysis and appears to represent a somewhat clearer representation of fate-control perceptions. This "change" in factor structure thereby provides support for the notion of sharpening of perceptions over the course of the career commitment process.

A second line of evidence regarding structural change is apparent when one compares the factor analysis of officer data with the analysis of college student perceptions. Among Army officers, the factor *Positive Qualities of Army Life* is considerably more salient (i.e., accounts for a greater proportion of the variance) than it is among college students. Furthermore, this factor is much more focused in the Army officer than in either the college or high school student samples. Only five items had substantial loadings on this factor among the Army officers, compared with six for the college sample and eight for the high school sample.

While the "fate-control" factor appeared to account for the greatest proportion of the variance among college students, a similar factor appearing among Army officers appeared to decrease a bit in salience. Nevertheless, the "fate-control" factor (*Loss of Personal Control and Individuality*) still played a significant role in officer perceptions of the Army.

To recapitulate then, factor analysis of Beliefs about the Army held by high school students, college students, and Army officers indicated that

structural change takes place in the individual's perception of the Army at different points in the career commitment process. The nature of this structural change encompasses: (a) the increasing salience of "fate control" as an important perceived attribute of the Army, and (b) the increasing sharpness of the factor positive qualities of Army life across the cross-sectional groups.

Summary of Factor Analysis Results for the Beliefs about ROTC and Beliefs about the Army Items

The 26 Beliefs about ROTC and the 28 Beliefs about the Army items were factor analyzed for the high school, college, and Army officer groups. It was found that: (a) the factors defined by orthogonal varimax factor methods were very similar across the groups, and (b) the factors became more differentiated and specific -- i.e., fewer item components with loadings over .40, or a greater percentage of the variance accounted for by the factor -- in the sample sequence from high school to college to Army.

This sharpening of focus and change in salience of the various factors is probably attributable to two features of the career evolution process:

1. the greater familiarity with the career path on the part of the older samples (note how, in an analogous manner, Chapter 5 showed the correlations between the Beliefs about the Army items and career commitment to be much higher for the Army officer than for the college cadet group, owing to the former group's greater experience-base with the Army);

2. the different occupational needs and preferences accompanying increased maturity (e.g., an increased need for fate control in the college as opposed to high school samples).

The Effects of Procedural Variables of Various Indices of Career Commitment

The Analytic Design

A second set of cross-sectional comparisons was conducted via a series of multiple discriminant fuction analyses aimed at uncovering the effects of certain key time-related and procedural-related independent variables on commitment among ROTC cadets and Army officers. (As used in this discussion,

the term "procedural" refers to ROTC/Army program-related variables which are more manipulable by policy than are the demographic or socio-psychological determinants of commitment stressed in the prior chapters.) The time/procedural variables of interest are given in the first column of Figure 8.1. In order to control for possible confounding effects on commitment brought about by race, sex, and/or socioeconomic status, these variables (with father's education used to represent socioeconomic status) were included in the multiple discriminant function analysis as control variables, whose effects were partialled out prior to examination of the impact of the time/procedural variables on the criterion variables (see column 2, Figure 8.1). Criterion variables in the analysis were certain key attitudinal and behavioral indices of commitment, as spelled out in the last column of Figure 8.1.

Advantages of the Analytic Design

The above design had the following advantages:

1. It looked at commitment criteria -- factor scores emerging from the previously described factor analyses of Beliefs about ROTC/Army, and individual item components of the career commitment scale -- different from those already examined in Chapters 4 through 7 (criteria in these previous chapters were as follows: Chapter 4 -- membership in ROTC or the Regular Army; Chapters 5 and 6 -- total score on the career commitment scale; Chapter 7 -- personal value variables, socio-psychological scale variables, and job dimension variables related to commitment).

2. The use of multiple criterion variables allowed for investigation of the overall effects of the independent variables on both: (a) a statistically weighted *composite* of the criterion items that took into account the inter-relationship among criterion items, and (b) *individual* criterion variables of interest.

3. The use of control independent variables allowed for investigation of the effects of the procedural independent variables on the criterion variables, controlling for possibly confounding effects of race, sex, and father's education. Thus a purer test of the relationship between the procedural variables and the commitment variables was obtainable.

The remainder of this section will discuss the relationship between each procedural variable listed in Figure 8.1 and the commitment indices listed in the figure. Results obtained from ROTC cadets will be presented first,

FIGURE 8.1

VARIABLES USED IN MULTIPLE DISCRIMINANT FUNCTION ANALYSES
TO STUDY THE EFFECTS OF CERTAIN PROCEDURAL VARIABLES ON COMMITMENT

Independent Variables		Criterion Variables
Time/Procedural	Control	
Analyses Conducted on ROTC Cadet Data		
• Year in School • Year Decided to Join ROTC • Possession of an ROTC Scholarship	• Sex • Race • Father's Education	Factor Scores Derived from Factor Analysis of Beliefs about ROTC • *Potential for Self-Development* • *Personal Costs of ROTC Participation* Factor Scores Derived from Factor Analysis of Beliefs about the Army • *Loss of Personal Control and Individuality* • *Positive Qualities of Army Life* Selected Items Related to Career Commitment Intentions and/or Behavior • Item IV-N: "Do you intend to remain in ROTC through the end of your senior year?"[a] • Item IV-O: "Which type of Army service are you planning for after college?"[a] • Item IV-Q: "Do you intend to make a career of the Army?"[a] • Item IV-R: "How much are you looking forward to beginning your Army service after college?" • Item IV-S: "After college, would you join the Army if you did not have any contractual obligations?"[a] • Item IV-T: "How many years do you intend to serve in the Army?"[a] • Item IV-U: "Would you have joined ROTC if it did not offer any financial benefits?"
Analyses Conducted on Army Officer Data		
• Possession of an ROTC Scholarship in College • Length of Army Service • Receipt of Preferred Branch Assignment • Time Gap between College Graduation and Army Basic Course	• Sex • Race • Father's Education	Factor Scores Derived from Factor Analysis of Beliefs about ROTC • *Potential for Occupational- and Self-Development* • *Personal Costs of ROTC Participation* • *Positive Personal Interactions* Factor Scores Derived from Factor Analysis of Beliefs about the Army • *Positive Qualities of Army Life* • *Loss of Personal Control and Individuality* • *Patriotic Contribution of Army Service* Selected Items Related to Career Commitment Intentions and/or Behavior • Item IV-C: "How likely are you to make a career of the Army?"[a] • Item IV-S: "Do you intend to make a career of the Army?"[a] • Item IV-T: "Do you intend to continue in the Army after you have served your contractual obligation?"[a] • Item IV-V: "How much are you looking forward to extending your Army service?"[a] • Item IV-W: "How attached do you presently feel to the Army?"[a] • Item IV-Y: "Assume you were free of contractual obligations. If a civilian job were offered to you next month at 20% increase over your present Army salary, would you accept the civilian job?"[a] • Item IV-Z: "How satisfied are you with your Army job?"

[a]These items were component items of the career commitment scale (see Chapter 2).

followed by results obtained form Army officers. In the presentation and discussion of findings, the impact of each independent variable on the composite criterion index will be discussed. However, in the interest of parsimony, only those individual criterion variables most strongly affected by the independent variables will be singled out for discussion.

It should be pointed out that the means to be presented in subsequent sections of this chapter represent *means adjusted for the control background variables* of race, sex, and father's education and are thus *not* directly comparable with the raw means presented in the preceding chapters' tables.

Trends and Differences Among ROTC Participants

Year in school and commitment. Table 8.15 shows the trends by year in school of the four commitment indices with the highest significant relationship with year in school: intention to remain in ROTC ($F = 15.30$, $p < .001$), type of Army service contemplated ($F = 39.62$, $p < .0001$), Army career intention ($F = 7.97$, $p < .005$), and extent looking forward to Army service ($F = 39.55$, $p < .001$). The data in Table 8.15 are scored in a counter-intuitive manner, with a *low* score refecting *high* commitment.

Note that for *each* index in Table 8.15, commitment rises gradually from the freshman to the junior year, and then falls slightly at the senior year. This is *exactly* the trend pattern found for socio-psychological variables salient to commitment, and for expected satisfaction with various job dimensions in the Army (see Chapter 7, especially the illustrative curves given in Figures 7.3 and 7.10).

Time of entry into ROTC and commitment. Chapter 5 showed that the correlation between the time one's decision to join ROTC was made and subsequent commitment to ROTC/Army was .18 ($p < .001$), with cadets making an early decision to join ROTC scoring higher on the career commitment scale than cadets making a late decision.

Because time of entry into ROTC is a procedural variable that is easily manipulable by program policy, the effect of this variable on subsequent commitment was explored further using the already described multiple discriminant function analysis. A significant overall difference in the multivariate commitment criterion as a function of year of entry was obtained ($F = 2.33$, $df = 612$, $p < .008$, multivariate $R = .201$). Two criteria made substantial contributions to this difference, including: (1) an Army perceptions factor

TABLE 8.15

MEAN SCORES ON COMMITMENT INDICES, FOR ROTC CADETS, BY YEAR IN SCHOOL

	Year in School			
	Freshman	Sophomore	Junior	Senior
Intention to remain in ROTC (Item IV-N)[a]	2.66	2.31	1.45	1.54
Type of Army service contemplated (Item IV-O)[a]	4.58	3.83	2.60	2.98
Army career intention (Item IV-Q)[a]	3.04	2.79	2.60	2.68
Extent looking forward to Army service (Item IV-R)[a]	2.68	2.37	1.81	1.96

Note. The lower the score, the greater the commitment. All means in this table have been adjusted for race, sex, and father's education.

[a]See Figure 8.1 or Appendix B for the full item.

score *Loss of Personal Control and Individuality* ($F = 5.37$, $df = 612$, $p < .021$) and 2) Item IV-U, an ROTC commitment item concerning whether the individual would have joined ROTC in the absence of finanacial benefits ($F = 6.14$, $df = 612$ $p < .013$).

Mean scores on these two criteria for those who decided to enroll in ROTC in the sophomore year versus those who decided to enroll earlier are shown in Table 8.16. With regard to the factorial dimension of *Loss of Personal Control and Individuality* (the lower the score, the less personal control perceived to be provided by the Army), it is apparent that cadets who decided to enroll during their sophomore year perceive the Army as offering the individual less personal control and individuality than cadets who made the decision to enroll in ROTC during their freshman year or earlier. Similarly, cadets who decided to enroll in their sophomore year indicated that they would have been less likely to have join ROTC if it did not offer financial benefits.

It is possible to account for these findings on at least two bases. First, it may be that those cadets who make the ROTC enrollment decision early do so while considering only a limited range of decision parameters and, once enrolled, do not pause to reflect further on negative attributes of the decision. Those who make the decision later, however, do so while considering a wider range of influences and factors (possibly including financial benefits, for example) and may have somewhat less intrinsic motivation upon enrollment than those who enroll earlier. Thus, it may be that sophomore joiners were "pushed" more by external forces such as financial benefits, and less impelled by intrinsic ROTC/Army attributes.

A second possible basis for the finding is that late joiners have had less overall exposure to the ROTC program. Given the seemingly direct positive relationship between ROTC exposure and ROTC/Army commitment, this factor could well operate to result in a lower level of commitment among those who enrolled in the sophomore year or later.

These two explanations are, of course, not mutually exclusive and both sets of processes may be operative in terms of influencing career commitment.

Possession of an ROTC scholarship and commitment. Chapter 5 reported that possession of an ROTC scholarship was positively related to the overall

TABLE 8.16

MEAN SCORES ON COMMITMENT INDICES FOR ROTC CADETS, BY TIME OF ROTC ENROLLMENT DECISION

	Year Decided to Join ROTC	
	College Freshman or Earlier	College Sophomore
Perceived *Loss of Personal Control and Individuality*[a]	.27	.05
Willingness to join ROTC without financial benefits (Item IV-U)[b]	2.17	2.54

Note. All means in this table have been adjusted for race, sex, and father's education.

[a]Factor score from factor analysis of perceptions regarding the Army. This score has a mean of zero and a standard deviation of 1.0, with higher scores implying *less* perceived loss of personal control in the Army.

[b]The lower the score, the higher the commitment.

career commitment scale score among ROTC cadets (r = .23, p < .001), but unrelated to the overall career commitment scale score among Army officers. Again because the awarding of scholarships is a procedural variable easily manipulable by program policy, an attempt was made to explore these findings further. Thus the effects of ROTC scholarships on several commitment indices were re-examined, this time with the background variables of race, sex, and father's education controlled for.

Among ROTC cadets, the overall multivariate test of scholarship effects on the criterion composite was significant (F = 4.70, df = 614, p < .001, multivariate R = .279). Examination of bivariate tests revealed that four items contributed heavily to the observed differences, including: (a) Item IV-N, intention to remain in ROTC (F = 17.95, p < .001; (b) Item IV-O, type of Army service contemplated (F = 40.52, p < .001); (c) Item IV-Q, Army career intention (F = 17.95, p < .001); (d) Item IV-R, extent looking forward to Army service (F = 17.95, p < .001).

Mean scores on these four items for cadets with ROTC scholarships and cadets without ROTC scholarships are presented in Table 8.17. (Results in this table are scored in a counter-intuitive manner, with a *low* score reflecting higher commitment.) A very surprising finding emerges from Table 8.17: *once the background variables of race, sex, and father's education are controlled for, scholarship has a negative relationship with commitment among cadets.*[19] This was true for all four commitment indices significantly related to possession of an ROTC scholarship.

While this finding may, on the surface, appear to contradict commonsensical notions regarding the impact of scholarships, a number of recent findings from related military research provide additional buttressing. That is, in a series of incentive-testing studies carried out with both civilian and military personnel (cf. Frey, Glickman, Korman, Goodstadt & Romanczuk, 1974; Frey, Goodstadt, Korman, Romanczuk & Glickman, 1974), it was found that increasing the level of

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[19]The positive relationship reported in Chapter 5 between possession of an ROTC scholarship and ROTC/Army career commitment among cadets was a zero-order correlation which did not control for race, sex, or father's education. Also it was a relationship based on the total career commitment scale score, which was comprised of the four items in Table 8.17 plus three additional items not examined in the present analysis. Thus the two sets of findings are not contradictory.

TABLE 8.17

MEAN SCORES[a] ON COMMITMENT INDICES FOR ROTC CADETS, BY POSSESSION OF ROTC SCHOLARSHIP

	Cadets Having Scholarships	Cadets Without Scholarships
Intention to remain in ROTC (Item IV-N)	2.00	1.61
Type of Army service contemplated (Item IV-O)	4.46	3.00
Army career intention (Item IV-Q)	3.06	2.59
Extent looking forward to Army service (Item IV-R)	2.42	1.97

[a]The lower the score, the greater the commitment. All means in this table have been adjusted for race, sex, and father's education.

financial and other incentives offered to induce military service may reduce overall motivation. Thus, a scholarship may ultimately come to be perceived by the recipient as being too constraining, since it contractually binds him to a specified number of years of service. As a result of this perceived loss of freedom, the individual may manifest "reactance" (cf. Brehm, 1966) and become less psychologically committed.

A related theoretical development suggests another basis for the findings. Notz (1975) has recently suggested that the introduction of extrinsic rewards (like a scholarship) may subsequently lead to a decrement in intrinsic motivation. Thus, a scholarship may actually serve as an internal barrier preventing the development of intrinsic interest in ROTC and the Army.

Trends and Differences Among Army Officers

Having looked at the effects on commitment indices of year in school, year decision to join ROTC was made, and possession of an ROTC scholarship, the discussion now turns to examining the effects of analogous time- and procedural-related independent variables on commitment among Army officers.

Possession of an ROTC scholarship, length of Army service, and commitment. The longer-term effects of possession of an ROTC scholarship on commitment were studied by conducting the already described multiple discriminant function analysis on data from the Army officer sample. In addition to possession of an ROTC scholarship, the additional independent variable "length of Army service" was looked at, in order to get a feel for the evolving effects of scholarships on commitment (i.e., the effect of scholarships on commitment over time). Two indices of length of Army service were used: months already served in the Army and months left to serve in the Army. Similar results were obtained for both indices, so only results using the former variable are presented here.

No significant main effect between possession of an ROTC scholarship and the overall commitment composite was obtained. However, the relationship between the ROTC scholarship-months served in the Army interaction and the overall commitment composite was significant. The interaction between scholarship and months served in the Army was particularly evident on three items

($p < .001$) including likelihood of making a career in the Army (Item IV-C, F = 17.08, df = 423), Army career intention (Item IV-S, F = 13.23, df = 423), and satisfaction with Army job (Item IV-Z, F = 14.63, df = 423). As shown in Tables 8.18, 8.19, and 8.20, the picture of the scholarship x linear months in service trends is relatively consistent across the three indices of career commitment. That is, for those officers who had scholarships during ROTC:

1. the likelihood of making a career in the Army decreases over time,
2. career intention remains relatively constant until 31 months or more of service, when it suddenly decreases,
3. job satisfaction decreases over time.

In contrast to the picture of former scholarship holders, those Army officers who did *not* receive scholarships were found to:

1. increase the likelihood that they would make a career in the Army by the time they had served 31 months or more,
2. decrease career intention between thirteen and thirty months and then increase intention thereafter,
3. increase job satisfaction at the end of 31 or more months of service.

At first glance these findings appear to imply that the long-term effects of scholarships become apparent among Army officers after they have served approximately two and one-half years of their period of obligated service, at which point non-scholarship officers exhibit *greater* commitment than scholarship holders. However, this interpretation of the data may not be the right one. Non-scholarship ROTC-graduate Army officers who are past the two-year mark of obligated service are almost universally *Regular Army* officers. Chapter 5 showed these officers to be much more committed to a ROTC/Army career than Reservists. Thus the apparent long-term "negative effect of scholarships" may be attributable in large part to the disproportionate representation of Regular Army officers in the 31-month non-scholarship group.

The most appropriate summary of data on the relationship between ROTC scholarships and commitment among Army officers appears to be as follows: there is *no* indication that Army officers who held ROTC scholarships while in college are more committed than Army officers who did not hold ROTC scholarships. In all probability this is due to the fact that career commitment is

TABLE 8.18

INTERACTION OF SCHOLARSHIP WITH LENGTH OF SERVICE ON LIKELIHOOD OF MAKING A CAREER OF THE ARMY[a]

	Months Served in Army			
	0-12	13-19	20-30	31 or more
ROTC Scholarship	3.06	2.76	2.66	2.60
No Scholarship	2.90	2.82	2.72	4.05

[a]The higher the score, the greater the perceived likelihood. All means in this table have been adjusted for race, sex, and father's education.

TABLE 8.19

INTERACTION OF SCHOLARSHIP WITH LENGTH OF SERVICE ON ARMY CAREER INTENTION[a]

	Months Served in Army			
	0-12	13-19	20-30	31 or more
ROTC Scholarship	2.97	2.94	2.93	3.27
No Scholarship	2.96	3.23	3.21	1.99

[a]The lower the score, the greater the career intention. All means in this table have been adjusted for race, sex, and father's education.

TABLE 8.20

INTERACTION OF SCHOLARSHIP WITH LENGTH OF SERVICE IN TERMS OF SATISFACTION WITH ARMY JOB[a]

	Months Served in Army			
	0-12	13-19	20-30	31 or more
ROTC Scholarship	2.26	1.98	2.70	2.91
No Scholarship	2.39	2.28	2.69	1.69

[a]The lower the score, the greater the job satisfaction. All means in this table have been adjusted for race, sex, and father's education.

strongly determined by the freedom with which the initial participation/commitment decision is made. Participation decisions that are based heavily on extrinsic motivators (such as financial benefits) are not likely to result in subsequent high commitment.

This finding does not, however, negate the utility of the ROTC scholarship program. As stated in Chapter 5, the present study focuses on only one index of a "good" cadet or officer, that of his/her commitment to the ROTC/Army career path. It does not touch on another, equally important, index of a "good" cadet or officer, that of his/her competence in performing job duties related to the career. Since other data from this study show that, even with the ROTC scholarship program, ROTC students report *lower* academic abilities than their classmates, it may well be the case that the scholarship program is essential to attracting cadets and officers who would perform well on that second index of "goodness," that of quality performance.

Further research can establish the relationship between possession of an ROTC scholarship and performance among retained officers.

Receipt of preferred branch assignment, time gap between college graduation and Army Basic Course, and commitment. Finally, the effect on Army officer commitment of two procedural variables -- receipt of preferred branch assignment and time gap between college graduation and the Army Basic Course -- was examined. Chapter 5 reported that these variables were not related to career commitment scale score. However, because both these variables again represent procedural variables under control of ROTC/Army policy, a further attempt was made to examine whether they were related to any of the career commitment indices, after race, sex, and father's education were partialled out. No significant results were obtained in the reanalysis for either independent variable, on either the composite commitment criterion or any of its components.

One concludes that officers are able to adjust to Army-assigned branches and to delays in the start of their period of obligated Army service. These "disappointments" do not affect their subsequent commitment to the Army career path.

Commitment Trends across the Cross-sectional Samples

There was only one commitment-related item asked of high school, college, and Army officer respondents. This was the item "How likely are you to make a career of the Army?" Mean responses of high school, college ROTC, college non-ROTC, and Army officer samples to this item are presented in Table 8.21.

The overall difference in mean commitment as reflected in responses to this item was significant ($F = 278.49$, $df = 3$ and 3248, $p < .001$). Analysis of the significance of the difference between specific means revealed that:

1. High school students reported a greater likelihood of making a career in the Army than non-ROTC college students ($t = 9.42$, $df = 1885$, $p < .001$).

2. College ROTC cadets reported a greater likelihood of making a career in the Army than Army officers ($t = 4.10$, $df = 1363$, $p < .001$).

The first finding is not surprising in light of the fact that the high school sample represents a more general population of students, many of whom--those in schools not offering JROTC--have not yet had the opportunity to participate in the ROTC/Army career path, whereas the college non-ROTC sample represents a population of students who have had the opportunity (which they rejected) to participate in ROTC.

The latter finding is somewhat surprising since Army officers are further along the career path than ROTC cadets and thus have a greater personal investment in pursuing a career already started. However, in light of the already mentioned sharp discrepancy in the military related values and attitudes of cadets and officers (with cadets consistently reflecting more favorable attitudes towards ROTC/Army; see Chapters 4, 5, and 7), this discrepancy in commitment could probably have been predicted. As previously mentioned, it is impossible, given the cross-sectional data available, to attribute the differences to maturation effects (a drop in enthusiasm with increasing age), program effects (a drop in enthusiasm because of failure of the Army to meet cadets' high expectations) or historical effects (prior negative attitudes on the part of the present crop of ROTC-graduate Army officers owing to the conflicts associated with the Vietnam War era draft while they were students).

TABLE 8.21

MEAN LIKELIHOOD OF MAKING A CAREER IN THE ARMY ACROSS GROUPS

	Reported Likelihood of an Army Career [a]
High School Students (N=1028)	2.03
Non-ROTC College Students (N=859)	1.58
ROTC Cadets (N=738)	3.09
Army Officers (N=627)	2.80

[a]The higher the number, the greater the reported likelihood of an Army career.

Summary

Cross-sectional comparisons were made of (a) the factor structure underlying beliefs about ROTC and beliefs about the Army, (b) the effects on commitment of certain procedural variables manipulable by ROTC/Army program policy such as possession of an ROTC scholarship and time of entry into ROTC, and (c) respondents' answers to the single commitment-related item asked of all participants in the study: "How likely are you to make a career of the Army?"

Examination of the factor structure underlying beliefs about ROTC/Army held by high school students, college students, and Army officers revealed that:

1. Similar factors underlie these groups' perceptions of ROTC/Army.

2. The factors, however, become more differentiated and specific -- i.e., fewer item components with loadings over .40, or a greater percentage of the variance accounted for by the factor -- in the sample sequence from high school to college to Army.

The effects on commitment of certain procedural variables were examined by means of multiple discriminant function analyses that: (a) used factor scores obtained in the previous analyses as well as component items of the ROTC/Army career commitment scale as dependent variables, and (b) controlled for independent variables such as race, sex, and father's education, which were not being directly subjected to testing. It was found that:

1. Commitment to ROTC/Army among ROTC cadets rises gradually from the freshman to the junior year, and then falls slightly at the senior year.

2. Cadets who decide to join ROTC in their college sophomore year or later have lower commitment to ROTC/Army than cadets who make an earlier participation decision, because the former group of cadets: (a) perceive the Army as providing less personal control and individuality, and (b) are more strongly motivated by ROTC's financial benefits.

3. After race, sex, and father's education are partialled out, possession of an ROTC scholarship is negatively related to certain commitment indices among ROTC cadets.

4. Possession of an ROTC scholarship while in college is unrelated to Army officers' career commitment in the early months of obligated service, and negatively related to officers' commitment after they have served two and a half years of obligated service. However, this latter finding may be attributable to the overrepresentation of Regular Army officers among the non-scholarship, late-service group.

5. Neither failure to receive a preferred branch assignment nor delay in the onset of the Basic Course is related to commitment among Army officers.

Finally, cross-sectional comparison of the single commitment-related item asked of all respondents in the present study -- "How likely are you to make a career of the Army" -- revealed that the ROTC cadet group perceived itself as being the most likely to make a career of the Army, followed by (in descending order): the Army officer group, the high school group, the college non-ROTC student group.

The relationship between all these findings and those described in Chapters 4 through 7 was pointed out throughout the discussion.

CHAPTER 9
SUMMARY AND IMPLICATIONS

This final chapter will:

1. summarize the study's goals, activities, and limitations;
2. present a final descriptive model of the ROTC/Army career commitment process;
3. summarize major findings of the present study and discuss their implications for general principles of career commitment in the young adult years;
4. discuss implications of the study for improvement of the ROTC and Army programs; and
5. discuss implications of the study for future research in the area of ROTC/Army career commitment.

Project Goals, Activities, and Limitations

The goal of the study was to contribute to the state of existing knowledge about the process of career commitment among young Americans, by studying one career path in depth: that of becoming an Army officer via the ROTC route. The major research questions addressed by the study were: Who joins ROTC? Why? Which members of ROTC intend to remain on as career Army officers? Why? What factors in the individual and in his/her home, school, and societal environment increase or decrease commitment to an Army career? It was hoped that in the process of answering these questions: (a) the ROTC/Army career commitment process could be more fully understood; (b) a methodology could be developed which other investigators could use in studying other career paths; (c) principles applicable to career commitment in general would emerge; and, (d) recommendations on how ROTC and the Army could be improved to increase members' commitment could be spelled out.

The following activities were undertaken by the project:

1. The relevant literature and data banks were reviewed; preliminary interviews with 75 ROTC college students, 70 non-ROTC college students, and 60 Army officers were conducted; and a meeting of the project National Advisory Panel consisting of seven experts in the area of career development was convened--all in order to develop a tentative model of the ROTC/Army career commitment process.

2. A survey questionnaire based on the tentative model was constructed.

3. This questionnaire was circulated among a stratified random sample of 1,089 high school students, 1,633 college students (754 in ROTC; 879 not in ROTC) and 634 ROTC-graduate Army officers in the period of obligated Army service.

4. Responses to the questionnaire were analyzed and the tentative model tested by bivariate and multivariate statistical techniques.

The tentative model was designed to be as exhaustive as possible, in order to ensure that the final model would encompass all crucial determinants of the career commitment process. The model included nine global factors hypothesized to be related to career commitment in general: (a) the U.S. and world political and socioeconomic context; (b) the school and study program context; (c) individual background and primary socialization factors; (d) individual aptitudes; (e) individual life experiences or secondary socialization conditions; (f) individual values, interests, and aspirations; (g) individual attitudes; (h) information acquired by the individual about the career; and (i) career-related experiences. It also included numerous specific variables under each of these global factors, hypothesized to be operative in the ROTC/Army career commitment process in particular.

It must be pointed out that, while the career commitment process is necessarily longitudinal--occurring over time and involving continuous feedback between the individual and his/her environment--data in the present study were gathered at a single point in time using a cross-sectional, as opposed to longitudinal, design. Thus it is possible to impute heuristic, but not definitive predictive, validity to the study's findings; some of the relationships unearthed e.g., the positive relationships between military attitudes and ROTC/Army commitment may have evolved subsequent to, and not prior to, behavioral obligations to the Army (*cf.* Festinger, 1957; Bem, 1968).

Moreover, as was pointed out in Chapter 7, when trends or changes on crucial variables across the cross-sectional groups are found, it is not always possible to choose among alternate causal explanations of the data. The observed trends may be due to: (a) *maturation effects*, owing to age differences among the samples; (b) *historical effects*, owing to the different socio-political context in which ROTC participation decisions were made; (c) *self-selection effects*, i.e., greater homogeneity in the older samples because of drop-outs among deviants from the military mold; and (d) *program effects*, i.e., actual changes among career path participants brought about by the ROTC/Army experience.

Another limitation of the study lies in its focus on individual, but not environmental, determinants of commitment. It is probable that the socioeconomic climate in the country (e.g., the unemployment rate) influences military participation and commitment. Environmental variables such as this were included in the tentative model but were not studied, primarily because, since the data were collected at a single point in time, there was no variance in these societal predictor variables.

The effect of the ROTC and Army program contexts on commitment *was* evaluated, but this was done using respondents' perceptions of these contexts as the data (as opposed to "objective" indices such as number of ROTC instructors in the program, number of years the program had been in existence, etc.).

A Final Descriptive Model of ROTC/Army Career Commitment

Figures 1.2 and 1.3 presented the tentative model of ROTC/Army career commitment, which guided questionnaire construction and data analysis. Figure 9.1 presents the final[20] *descriptive* model of ROTC/Army career commitment, based on present study's findings. The figure is not very different from Figure 1.2, because the tentative model performed quite well in successive evaluations of its ability to account for ROTC/Army participation and commitment (Chapters 4 and 5).

The final descriptive model in Figure 9.1 was empirically tested for cadets in Basic ROTC, cadets in Advanced ROTC, White Army officers in their period of obligated Army service, and Black Army officers in their period of obligated Army service. Results of the path analyses were discussed in detail in Chapter 6 and will be summarized again in the next section. These path models can be viewed as the final[20] *empirical* models of the ROTC/Army career commitment process.

Implications of Findings of General Principles of Career Commitment

This section will present some general principles of career commitment in the young adult years, using data from the present study as evidence. Because

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20 The word "final" model is used here to mean "as of the time of the present study." Needless to say future research can and should build on and further refine these models.

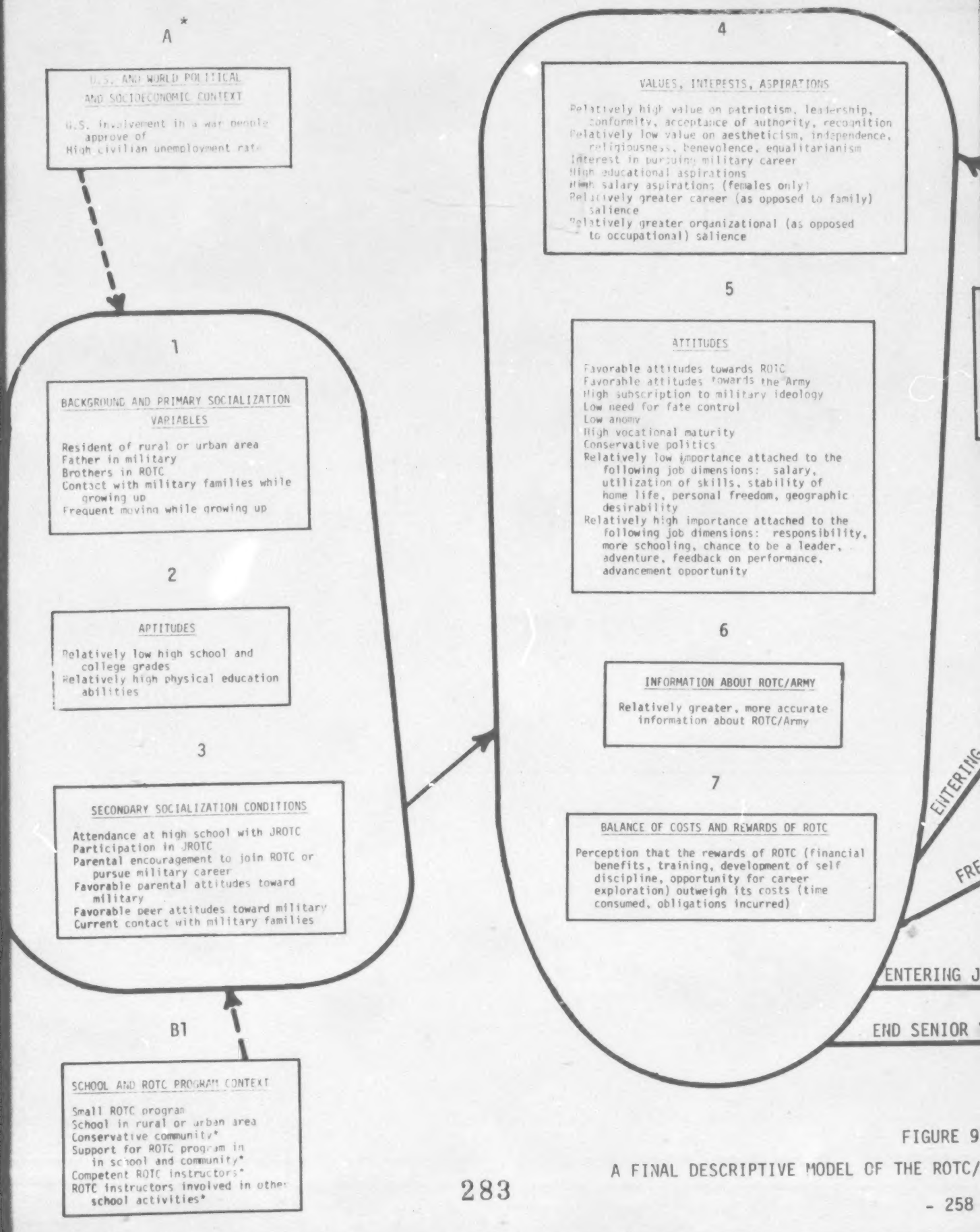
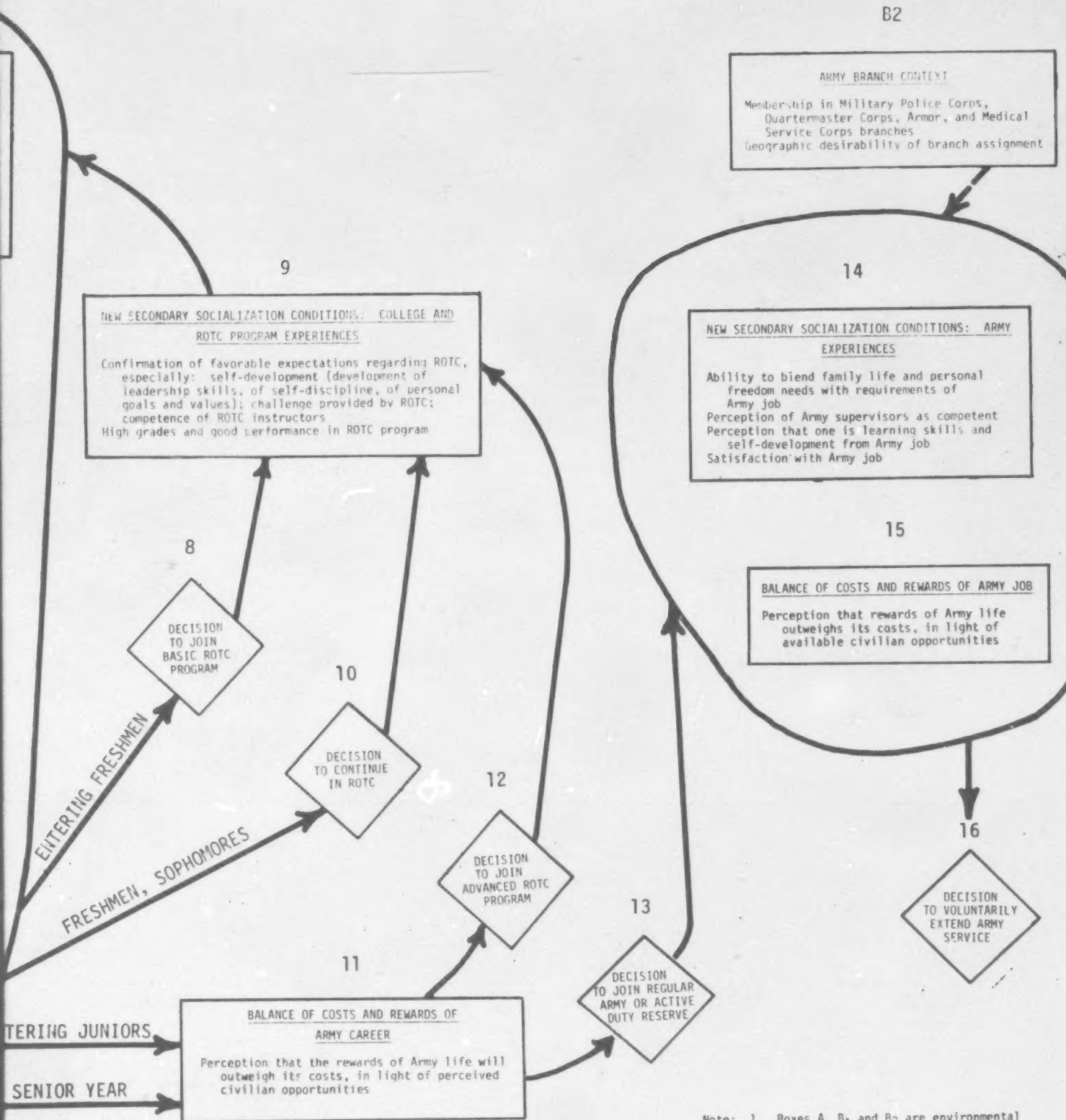

A*
U.S. AND WORLD POLITICAL AND SOCIOECONOMIC CONTEXT
U.S. involvement in a war people approve of
High civilian unemployment rate
1
BACKGROUND AND PRIMARY SOCIALIZATION VARIABLES
Resident of rural or urban area
Father in military
Brothers in ROTC
Contact with military families while growing up
Frequent moving while growing up
2
APTITUDES
Relatively low high school and college grades
Relatively high physical education abilities
3
SECONDARY SOCIALIZATION CONDITIONS
Attendance at high school with JROTC
Participation in JROTC
Parental encouragement to join ROTC or pursue military career
Favorable parental attitudes toward military
Favorable peer attitudes toward military
Current contact with military families
B1
SCHOOL AND ROTC PROGRAM CONTEXT
Small ROTC program
School in rural or urban area
Conservative community*
Support for ROTC program in in school and community*
Competent ROTC instructors*
ROTC instructors involved in other school activities*
4
VALUES, INTERESTS, ASPIRATIONS
Relatively high value on patriotism, leadership, conformity, acceptance of authority, recognition
Relatively low value on aestheticism, independence, religiousness, benevolence, equalitarianism
Interest in pursuing military career
High educational aspirations
High salary aspirations (females only)
Relatively greater career (as opposed to family) salience
Relatively greater organizational (as opposed to occupational) salience
5
ATTITUDES
Favorable attitudes towards ROTC
Favorable attitudes towards the Army
High subscription to military ideology
Low need for fate control
Low anomy
High vocational maturity
Conservative politics
Relatively low importance attached to the following job dimensions: salary, utilization of skills, stability of home life, personal freedom, geographic desirability
Relatively high importance attached to the following job dimensions: responsibility, more schooling, chance to be a leader, adventure, feedback on performance, advancement opportunity
6
INFORMATION ABOUT ROTC/ARMY
Relatively greater, more accurate information about ROTC/Army
7
BALANCE OF COSTS AND REWARDS OF ROTC
Perception that the rewards of ROTC (financial benefits, training, development of self discipline, opportunity for career exploration) outweigh its costs (time consumed, obligations incurred)
ENTERING
FRE
ENTERING J
END SENIOR

FIGURE 9

A FINAL DESCRIPTIVE MODEL OF THE ROTC/


ARMY BRANCH CONTEXT
Membership in Military Police Corps, Quartermaster Corps, Armor, and Medical Service Corps branches
Geographic desirability of branch assignment
14
NEW SECONDARY SOCIALIZATION CONDITIONS: ARMY EXPERIENCES
Ability to blend family life and personal freedom needs with requirements of Army job
Perception of Army supervisors as competent
Perception that one is learning skills and self-development from Army job
Satisfaction with Army job
15
BALANCE OF COSTS AND REWARDS OF ARMY JOB
Perception that rewards of Army life outweighs its costs, in light of available civilian opportunities
16
DECISION TO VOLUNTARILY EXTEND ARMY SERVICE
9
NEW SECONDARY SOCIALIZATION CONDITIONS: COLLEGE AND ROTC PROGRAM EXPERIENCES
Confirmation of favorable expectations regarding ROTC, especially: self-development (development of leadership skills, of self-discipline, of personal goals and values); challenge provided by ROTC; competence of ROTC instructors
High grades and good performance in ROTC program
8
DECISION TO JOIN BASIC ROTC PROGRAM
10
DECISION TO CONTINUE IN ROTC
12
DECISION TO JOIN ADVANCED ROTC PROGRAM
13
DECISION TO JOIN REGULAR ARMY OR ACTIVE DUTY RESERVE
11
BALANCE OF COSTS AND REWARDS OF ARMY CAREER
Perception that the rewards of Army life will outweigh its costs, in light of perceived civilian opportunities
ENTERING FRESHMEN
FRESHMEN, SOPHOMORES
TERING JUNIORS
SENIOR YEAR

Note: 1. Boxes A, B_1 and B_2 are environmental determinants of commitment and for the most part were not tested in the present study (* denotes variables not tested).

2. Boxes 1, 2, and 3 are "remote" influences on commitment and were found to be most salient at the Basic ROTC career stage. Boxes 4, 5, 6, and 7 are "intermediate" influences on commitment and were found to be most salient at the Advanced ROTC career stage. Boxes 9 and 14 are "proximate," experiential variables and were found to be most salient at the post-college, early Army service career stage.

FIGURE 9.1

HE ROTC/ARMY CAREER COMMITMENT PROCESS

the present study focused only on a single career path, the principles to be presented should be viewed as hypotheses, until verified and tested on other career paths.

Principle 1. A whole gamut of demographic, socio-psychological, informational, experiential, and environmental factors influence career decisions and intentions. Specifically, the following general factors potentially influence career decisions and intentions: (a) the U.S. and world political and socioeconomic context; (b) the school and study program context; (c) individual background and primary socialization factors; (d) individual aptitudes; (e) individual life experiences or secondary socialization conditions; (f) individual values, interests, and aspirations; (g) individual attitudes; (h) information acquired by the individual about the career; and (i) career-related experiences. Influences (a) and (b) are environmental factors; influences (c) through (i) are individual factors, which may be further characterized as: demographic (c and d), socio-psychological (f and g), informational (h), and experiential (e and i).

Evidence. The bivariate analyses conducted in Chapters 4 and 5 showed these variables to be highly successful in discriminating ROTC students from non-ROTC students and in "predicting," or at least correlating with, ROTC/Army commitment among ROTC cadets and Army officers.

Principle 2. These general factors are interrelated according to the schema presented in Figure 9.2.

Evidence. Empirical path coefficient models based on the general model presented in Figure 9.2 explained from .35 to .53 of the variance in ROTC/Army career commitment among ROTC/cadets and Army officers (see Chapter 6).

Principle 3. While the specific variables influencing career-related decisions and intentions may vary from one career path to another, the general factors involved (see Principles 1 and 2) are alike.

Evidence. Because the present study focused solely on participation in and commitment to a single career path (ROTC/Army) there is no direct evidence from this study to support this proposition. However it *is* true that the general factors investigated here were found to likewise apply in a completely different setting, that of career decisions related to the priesthood role (Schoenherr and Greeley, 1974).

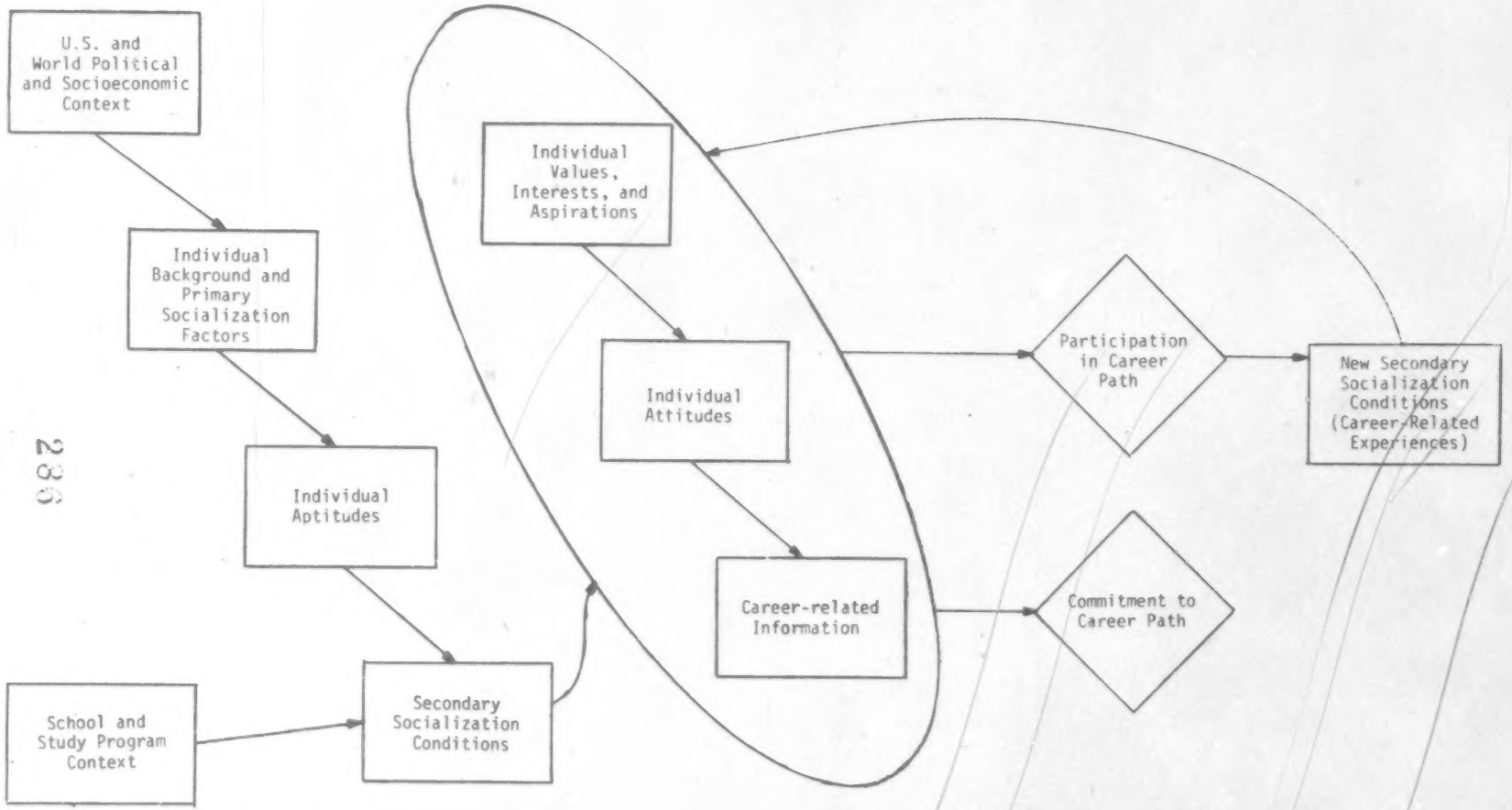

U.S. and World Political and Socioeconomic Context
Individual Background and Primary Socialization Factors
Individual Aptitudes
School and Study Program Context
Secondary Socialization Conditions
Individual Values, Interests, and Aspirations
Individual Attitudes
Career-related Information
Participation in Career Path
Commitment to Career Path
New Secondary Socialization Conditions (Career-Related Experiences)

FIGURE 9.2

A GENERAL MODEL OF CAREER COMMITMENT IN THE YOUNG ADULT (HIGH SCHOOL SENIOR, COLLEGE, IMMEDIATE POST-COLLEGE) YEARS

Principle 4. Different career influences become salient at different career stages.

Evidence. The path analysis of cadet and officer commitment (Chapter 6) showed that remote demographic background variables were most salient at the early college career stage; these gave way to socio-psychological variables (i.e., the match between one's values and job interests and that provided by the career) at the late college career stage and to job-related experiences at the immediate post-college career stage.

Evidence. Parental encouragement was very influential (highly related to participation and commitment) at the high school and college career stages; but was not as influential as *peer* attitudes at the post-college period (Chapters 4 and 5).

Principle 5. Participants in a career path differ from non-participants in aptitudes, values, salient attitudes, and dimensions sought in a job.

Evidence. Striking differences between ROTC and non-ROTC college students were found on these variable sets (Chapter 4).

Principle 6. These differences between career path participants and non-participants increase with time.

Evidence. Many more differences were found between ROTC and non-ROTC students at the college than at the high school level, despite the fact that the high school sample was, demographically speaking, more diverse (Chapter 4).

Evidence. Discriminant function analyses conducted to separate the ROTC from the non-ROTC student groups (Chapter 4) performed best for the college juniors and seniors, next best for the college freshmen and sophomores, and least well for the high school seniors.

Evidence. Trend analyses conducted across the early college, late college, and post-college career stages on the value, attitude, and job dimension variable sets (Chapter 7) identified many more significant trends for ROTC/Army career path participants than for the non-ROTC/Army comparison groups.

Principle 7. Early exposure to a career path increases subsequent participation in and commitment to the career path.

Evidence. A strong career modelling effect was found in the present study, with proportionately more ROTC students and Army officers having military-career fathers than non-ROTC students (Chapter 4). Also, within the ROTC

cadet and Army officer groups, those having a military father expressed higher commitment to the ROTC/Army career path than those having a civilian father (Chapter 5).

Evidence. Proportionately more ROTC students than non-ROTC students had relatives (siblings, cousins) in ROTC or the military (Chapter 4).

Evidence. Participation in Junior ROTC (JROTC) was positively related to ROTC/Army career commitment among ROTC college cadets. Attendance at a high school with JROTC was positively related to ROTC/Army commitment among high school students, even when JROTC participants were not included in the computation (Chapter 5).

Evidence. ROTC cadets who decided to join ROTC *before* their sophomore year in college had higher commitment to ROTC/Army than ROTC cadets who decided to join ROTC in their sophomore year (Chapters 5 and 8).

Principle 8. Increased family and/or financial responsibilities are correlated with greater career commitment, because these responsibilities make it difficult for an individual to switch careers even at an early career stage.

Evidence. Married ROTC cadets expressed higher commitment to ROTC/Army than single cadets. Married Army officers expressed higher commitment to an Army career than single officers (Chapter 5).

Principle 9. The more intrinsic or free one's initial motivation in exploring the career path, the greater the likelihood of subsequent commitment to the path.

Evidence. Possession of an ROTC scholarship, a strong "extrinsic" motivator, was not related to commitment in any consistent way. At the college ROTC level it was positively related to the overall career commitment scale score but negatively related to some of the individual commitment scale items. At the Army officer level it was unrelated or negatively related to the overall career commitment score and the commitment scale's component items (Chapters 5 and 8).

Evidence. The Beliefs about ROTC items which were negatively or insignificantly related to commitment among ROTC cadets and Army officers (Chapter 5) all had to do with the utilization of ROTC as a vehicle for attainment of ends other than an Army commission (to satisfy parents, to earn money in college, to have a good time, to have a guaranteed job after graduation, to postpone decisions about what to do after college)

Respondents who agreed that ROTC satisfies these (admittedly positive) instrumental ends did not tend to be high in commitment, presumably because they joined ROTC for the said instrumental ends rather than to truly explore a military career.

Principle 10. There is a sharp barrier between the college career stage and the immediate post-college career stage.

Evidence. Striking differences were found in cadets' vs. officers' responses to the Beliefs about ROTC and Beliefs about the Army items, with cadets' opinions being more positive on almost all items (Chapters 4 and 7). This finding is in line with that of many previous investigators, and is attributable at least in part to disconfirmation of idealistic youthful expectancies by the realistic world of work.

Principle 11. College-stage experiences with a career path influence commitment indirectly, by causing an individual to have high expectations about the post-college career stage. Post-college career-stage experiences influence commitment directly.

Evidence. Path analyses conducted on the data (Chapter 6) showed that cadets' satisfaction with their ROTC program had (only) an indirect effect on their commitment to ROTC/Army (via the high-expectations-about-the-Army route). Army officers' satisfaction with their current job had a strong direct effect on their commitment.

Principle 12. Experiences affect commitment more stongly than expectations.

Evidence. The Beliefs about the Army items correlated with commitment for both the cadet and officer groups, but the magnitude of the correlations was much higher for the officer group (Chapter 5).

Principle 13. An individual's perceptions of a career become increasingly differentiated and specific with time.

Evidence. Factor analysis of the Beliefs about ROTC and Beliefs about the Army items (Chapter 8) showed that with increasing career stage (high school vs. college vs. Army data) the obtained factors became sharper and more highly specific.

Principle 14. The career commitment process is different for different subgroups of the population.

Evidence. Different path analytic models of career commitment emerged for White and Black Army officers (Chapter 6) with White officers'

commitment being determined to a large extent by "intermediate" influences, or predispositions (values, motivations, attitudes) existing at the end of the college career stage; and with Black officers' commitment being determined more directly by either "remote" influences, especially parental encouragement, or by "proximate" influences, especially job experiences.

Evidence. Males and females had different career plans consonant with existing cultural norms on what constitutes a "male" or a "female" career (Chapter 4).

Implications of Major Findings for the ROTC and Army Programs

Having discussed implications of the present study for understanding the ROTC/Army career commitment process as well as the general process of career commitment in the young adult years, the discussion now turns to implications of the study for ROTC/Army recruitment, selection, and retention.

Implications for Recruitment

How can the ROTC potential applicant pool be enlarged? The study offers four suggestions, the first two of which deal with recruitment advertising strategies, the last two with recruitment targets or sources:

1. It was found that there were "popular," as well as "good" reasons for joining ROTC, and that these two motivation-sets did not always coincide. (*Popular* reasons are those chosen by the greatest number of cadets as their primary reason for joining ROTC, to wit: an Army commission, the financial benefits accompanying ROTC, the satisfaction or pride it would give one's parents. *Good* reasons are those associated with greatest subsequent commitment to ROTC/Army, to wit: an Army commission, patriotism, job security after graduation.) Recruitment advertising could stress either motivation set, depending on the demand and supply of potential applicants. Thus, during "lean" years, or years when the Army wants to increase the sheer volume of enrollment, recruitment efforts could stress the *popular* reasons for joining. However, during years where potential enrollment figures appear to be sufficient or even in surplus, recruitment efforts could stress the *good* reasons for joining (good in terms of subsequent retention; ideally, "good" would mean in terms of subsequent *retention* as well as quality *performance*; however, the present study focused only on commitment and not on performance evaluation). Thus,

during years when there are sufficient numbers wanting to join ROTC, the Army could stress in its recruitment advertising the opportunity for true career exploration and preparation offered by ROTC, as well as the job security and possible Army commission awaiting one after graduation.

2. It was found that non-ROTC students' misperceptions of ROTC consisted of exaggerating : (a) the extent of obligations cadets take on when they join ROTC; (b) the salary and fringe benefits accompanying membership in ROTC/Army. These findings have implications for recruitment advertising. They suggest that there is no need to stress the fringe benefit package accompanying ROTC/Army, as students are well aware of these benefits (indeed think they are more extensive than they actually are). Rather, one aspect of advertising to stress, or at least point out, is the limited nature of obligations contracted by joining ROTC.

3. It was found that parents are an important influence in shaping career plans, especially during the student career stages, and most especially for the Black subgroup. Thus parents are potentially an important recruitment source, and recruitment efforts could be expanded to focus on them.

4. It was found that commitment to ROTC/Army is lower for suburban than for rural or urban residents. This implies that recruitment efforts will not be as successful in the suburbs as in rural or urban areas.

Implications for Selection

Which individuals have a predisposition to join and be highly committed to ROTC/Army? The model given in Figure 9.1 (Boxes 1 through 6) describes the demographic, experiential, and socio-psychological profile of such a "good candidate." It must be stressed again that the concept of goodness here refers only to empirical salience to career participation and commitment criteria and not necessarily to either: (a) empirical salience to performance criteria, or (b) salience to an idealized notion of "what a good cadet should be."

The following additional implications for ROTC/Army selection are derivable from the data:

1. It was found that demographic background variables such as race, sex, or socioeconomic status were not nearly as powerful in predicting ROTC/Army participation and commitment as were the socio-psychological variables of values, attitudes, and job needs. Thus selection criteria should *not* focus on demographic variables, except perhaps with the goal of encouraging currently underrepresented groups to apply. Rather, selection criteria should focus on the

potent socio-psychological, motivational variables such as favorable military attitudes, the search for adventure and for a chance to be a leader in a job, etc.

2. It was found that ROTC students had lower high school and college grades than non-ROTC students. Thus a greater effort should be made to recruit and select students of higher academic ability into ROTC, with the goal of having ROTC students at least on par with their classmates.

3. It was found that proportionately fewer Black ROTC graduates (compared to their White peers) are selected for a Regular Army commission. Despite this underrepresentation in the Regular Army and consequent overrepresentation in the Reserves, Black Army officers have higher commitment to the Army than White officers. Also, Blacks in general, among both the student and officer groups, view ROTC and the Army more favorable than Whites. It may benefit ROTC and the Army to investigate why proportionately more Black than White ROTC graduates get funnelled into the Reserves. Do Blacks have poorer grades than Whites? Do they perform more poorly in the ROTC programs? Do factors operate to discriminate against them in Regular Army selection procedures?

Implications for Retention

Finally, data gathered in the present study have implications for how the ROTC and Army programs can be restructured or improved to increase retention rates among cadets and officers.

Implications for Changes in the ROTC Program

1. The dimensions on which ROTC received the least favorable ratings from cadets as well as officers had to do with: (a) the "poor image" of ROTC and ROTC cadets; and (b) the perception among officers and cadets that ROTC does not provide an accurate picture of Army life. The former problem may disappear as the turmoil associated with the Vietnam War recedes from the consciousness of young Americans. If it does not disappear, some effort should be spent determining the exact composition of the poor image, so the problem can be directly addressed.

The latter problem--ROTC not providing an accurate picture of Army life--can probably be attacked by: (a) having ROTC programs include more field and "hands-on experience" activities; and (b) making sure ROTC students are made aware of the problems as well as satisfying experiences awaiting them in the Army (e.g., by means of seminars conducted by young ROTC-graduate Army

officers in their period of obligated Army service).

2. It was found that financial benefits and job contracts attract people to ROTC/Army (indeed that the Army would lose 20-40% of its ROTC graduates without these external motivators) but that joining ROTC solely to take advantage of the benefits or joining the Army merely to comply with contractual requirements are correlated with low commitment to ROTC/Army. The social psychological literature contains advice on how to resolve these apparently contradictory matters, for policy purposes. The literature consistently says: if you *must* pay a person to perform a discrepant act (in the present case, if you must offer him/her a financial reward to join ROTC/Army), offer the *minimum* amount necessary to get the person to perform the act. Such minimum reward is associated with the greatest subsequent attitude change, i.e., the greatest reduction in perceived discrepancy of the act with one's true feelings. In the present case, offering of financial benefits large enough to attract the numbers the Army needs to ROTC, but not so large as to be perceived by recipients as the sole reason for their joining, should lead to the greatest subsequent commitment to ROTC/Army. Further research should be conducted to establish what this appropriate "minimum incentive" is.

3. It was found that possession of an ROTC scholarship was inconsistently related to commitment while in college and unrelated to commitment after college (in the period of obligated Army service). This finding implies that the cost-effectiveness of the ROTC scholarship program should be reevaluated carefully.

4. It was found that "late-joiners," or cadets who decided to join ROTC in their sophomore year in college had significantly lower commitment to ROTC/Army than "early-joiners," or cadets who were members of high school JROTC and/or college Basic ROTC. This finding is probably attributable to the fact that the late-joiners are influenced to a larger extent than the early-joiners by the extrinsic motivator of $100/month accompanying membership in Advanced ROTC. ROTC may wish to reconsider its late-joiner option in light of this finding.

Implications for Changes in the Army

1. The dimensions on which an Army officer career received the least favorable ratings (from *all* respondent groups) were: stability of home life, family contentment, personal freedom, geographic desirability, contribution to society, and utilization of skills. Further research should be undertaken to

find out how the Army can better serve its members on these unsatisfactory dimensions.

2. It was found that "independence," or being free to make one's own decisions, was the most important value held by respondents in the sample. Valuing independence, however, was negatively related to both participation in and commitment to the ROTC/Army career path. Are military life and independence inherently contradictory? If not, how can components of the Army be changed to be more responsive to this strongly held American value? Data from the present study indicate that such changes would attract and retain a wider range of individuals in the Army officer corps.

Implications of Major Findings for Future Research in the Area of Career Commitment

As pointed out throughout this report, there are many questions a cross-sectional study such as the present one cannot answer, because career commitment is inherently a longitudinal, developmental process. The major unresolved questions about ROTC/Army career commitment which future research can address are:

1. To what extent do societal and ROTC-program environmental variables affect commitment?

2. Why is there such a sharp discrepancy in Beliefs about ROTC and Beliefs about the Army on the part of cadets vs. officers?

3. To what extent are the growing socio-psychological differences between the ROTC and non-ROTC student groups attributable to: (a) attrition from the cadet ranks of those who do not "fit" the military mold? or (b) actual socio-psychological changes in the cadets' profile caused by the ROTC program?

4. Are the correlates of participation and commitment isolated in the present study true *predictors* of participation and commitment or are they mere *consequences* of participation and commitment brought about by cognitive dissonance[21] reduction mechanisms (Festinger, 1957)?

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[21] Cognitive dissonance theory states that if an individual is induced to engage in behavior that is inconsistent with his beliefs or attitudes, he will experience discomfort or dissonance which will motivate him to believe that he actually holds the beliefs or attitudes implied by his behavior.

It is recommended that the following follow-on studies be undertaken to address these lingering issues:

1. Conduct a pilot study among ROTC programs that participated in the present study to try to uncover institutional and ROTC-program context variables that affect commitment. Some of these relevant contextual variables are: size of school; location of school in relation to metropolitan areas; ownership of school; political climate of school; political climate of the community in which school is located; support/opposition to ROTC program in school; size of ROTC program (size of instructional staff; number of cadets enrolled); number of years ROTC program has been in operation; number of years experience of ROTC instructors; extent to which ROTC instructors are involved in other campus activities; and, content of ROTC curriculum. Data from these ROTC-context variables can then be related to the commitment scores of cadets attending the institutions.

2. Conduct a longitudinal study of the ROTC/Army career commitment process, using the present study's theoretical model, data collection instruments, and cross-sectional findings as the basic building block.[22] Two research designs are recommended, both longitudinal in nature but differing in scope, duration, cost, and consequent amount of information obtainable as an end-product.

   a. A two-year study which would follow a representative group of ROTC cadets from the beginning of their senior year in college to the end of their first year of obligated Army service. This study would encompass the sharp "barrier" existing between the college and immediate post-college stages and should be able to account for the sharp discrepancy obtained in the present study between cadets' and officers' perceptions of ROTC and the Army.

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[22] Needless to say, the instrument used in the present study should be modified and improved for any longitudinal follow-on, based on what the present study has, or has not, established. For example, situational determinants of commitment and critical experiences affecting commitment should be emphasized, because the effect of these variables has not been established as clearly as the effect of the background and socio-psychological variables.

b. A three-year study which would follow representative groups of (a) ROTC freshmen, (b) ROTC sophomores, (c) ROTC juniors, (d) ROTC seniors, (e) ROTC-graduate Army officers in their first year of obligated service, and (f) ROTC-graduate Army officers in their second year of obligated service to the end of (a) their junior year in college, (b) their senior year in college, (c) their first year of obligated Army service, (d) their second year of obligated Army service, (e) their third year of obligated Army service, and (f) their fourth year of obligated Army service, respectively. Career-path drop-outs among the sample should continue to be studied (as civilians) during the duration of the study.

This cohort-sequential design spans all the major decision points of interest in the ROTC/Army career commitment process (diamonds in Figure 9.1) and is capable of addressing all the lingering issues listed at the beginning of this section. It is clearly the design of choice if research funds are available and if interest in this research area continues to prevail.

In conclusion then, it is hoped that the present study contributed to understanding commitment to the ROTC/Army career path and to understanding career commitment processes among young Americans in the pre-college, college, and immediate post-college years. In addition, it is hoped that the model and data analytic techniques in the present study will be of help to other investigators looking into other, varied career paths of interest.

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